# **ECONOMIC REGULATION AGREEMENT**

## BETWEEN

## THE GOVERNMENT

#### AND

# **AEROPORTS DE PARIS**

# 2016-2020

I PURP	OSE AND SCOPE OF APPLICATION OF THE AGREEMENT	6
I.1 Purpos	e of the Agreement	6
I.2 Term of	of the Agreement	6
I.3 Regula	ated scope	6
II INVES	STMENTS, QUALITY OF SERVICE AND SUSTAINABLE	0
DEVELO	2MEN I	8
II.1 Inve	Erreur ! Signet no	n défini.
II.2 Oua	lity of service	10
II.2.1 S	ervice Quality Indicators	10
II.2.2 D	efinition and measurement of service quality indicators	11
II.2 S	ervice quality targets	
III PRICI	NG	13
III.1 Defi	nition of pricing periods	13
III.2 Con	ditions for changes in fee rates	13
III.2.1	Fees subject to the agreement	13
III.2.2	14Average rate of changes in Fee rates	
III.2.3	15Ceiling for changes in Fee rates	
III.2.3.	Pricing principles and equations	15
III.2.3.2	2 Base ceiling rate for changes in Fee rates	16
III.2.3	Adjustment of the Fee increase cap according to traffic	16
III.2.3.4	Adjustment of the Fee increase cap according to quality of service	17
111.2.3	Adjusiment of the Fee increase cap according to the implementation of the investment	19
III.2.3.0	6 Adjustment of the Fee increase cap according to changes in operational expenses	19
III.3 Pric	ing policy	19
III.3.1	Pricing structure	19
III.3.2	Adjustments for reasons of public interest	20
III.4 Cha	nges in the scope of fees	21
III.4.1	Modification of pricing terms and conditions for existing services	21
III.4.2	New services or cost variations	22
III.4.3	System for certain new fees	23
III.4.4	The effect of changes to the investment programme	24
III.4.5	The effect of changes to asset and expense allocation methods between the regulated	-
	scope and the other activities of Aéroports de Paris	25

IV CONSULTATION AND COOPERATION WITH CLIENT	S 26
IV.1 Economic consultative commission	26
IV.2 Monitoring of major investment operations	27
IV.3 Launch of new operations	27
IV.4 Operational committees for quality of service in terminals	27
V TERMS OF PERFORMANCE OF THE AGREEMENT	29
<ul> <li>V.1 Information and control</li> <li>V.1.1 Information to be supplied by Aéroports de Paris</li> <li>V.1.2 Monitoring committee</li> <li>V.1.3 Auditability</li> <li>V.1.4 Non approval of rates</li> </ul> V.2 Review or early termination of the agreement <ul> <li>V.2.1 Special circumstances justifying a review of the agreement</li> <li>V.2.2 Exceptional and unforeseeable circumstances</li> </ul>	29 29 30 30 30 30 30 31 31 32
	33
VI.1 Penaities	33
VI.2 Preparation of the next agreement	
VI.3 Forwarding of notices	33
VI.4 Advertising	34
APPENDICES	35

#### FOREWORD

1 – With the benefit of a privileged geographical location in Paris, a unique development capacity in Europe and a sound economic model, Aéroports de Paris, Europe's second largest airport group, is keen to enhance the Parisian airport system, serving the growth and attractiveness of the Paris market.

Air transport is a high-growth sector where each additional million passengers in Paris contribute to the creation of over 4,000 jobs and boost the French economy as a whole. Furthermore, Aéroports de Paris, on account of its territorial footing, naturally promotes the interests of the Paris market and of airport territories in order to develop air links with the rest of the world.

However, the natural appeal of Paris and the qualities of the city's airport system are no longer enough to ensure growth. In today's profoundly changing and increasingly competitive air transport sector, Aéroports de Paris now has to meet a two-fold challenge (competitiveness and appeal) to optimise service for passenger customers and airlines, and in the process capture for Paris a significant share of the growth in worldwide air traffic.

The five-year period from 2016 to 2020 will thus combine investment with cost control in order to underwrite a policy conducive to the development of traffic and the competitiveness of air transport in Paris.

This agreement reflects the company's market-gain strategy, creating value for customers, partners, shareholders and employees, and for the economic and social development of territories. It thus embodies the purpose of Aéroports de Paris to consolidate and promote its role as major player in the aeronautical industry for the benefit of French growth.

2 – Aéroports de Paris holds and operates the three main airports in the Paris region (Paris-Charles de Gaulle, Paris-Orly, Paris-Le Bourget). At these three main airports, it provides passengers, airlines, cargo and mail operators with high-performance facilities and offers a suite of services tailored to meet their needs. The three airports are able to accommodate all categories of traffic in a complementary way: long-haul wide-bodied aircraft, medium-haul, low-cost, charter and business aircraft. Moreover, Paris-Charles de Gaulle airport accommodates the hub for the Skyteam alliance, thereby supplementing connecting flight traffic for over 20 million passengers.

3 - Pursuant to article L. 6325-2 of the Transport Code and article R. 224-4 of the French Civil Aviation Code, the economic regulation of Aéroports de Paris is based preferentially on multiannual economic regulation agreements, a factor that provides both greater visibility for the company and its clients, and an incentive to improve performance.

In particular, the purpose of these economic regulation agreements is to establish a ceiling for changes to the main fees due for services rendered in view of the investment programme established, and to set objectives for service quality and the related financial incentive system.

In compliance with the provisions of article R.224-3-1 of the French Civil Aviation Code, they are based on the application of the criterion of fair return on invested capital appreciated over a scope of activities called "regulated scope".

4 – Pursuant to these provisions, the Government and Aéroports de Paris have decided to sign the present agreement, covering the period from 2016 to 2020.

While the 2011-2015 economic regulation agreement was a transition document, the present agreement is designed to implement, by the year 2020, the principle of fair return on invested capital, evaluated by comparing return from the regulated scope with the weighted average cost of capital.

5 – The preparation of this agreement has involved:

- a consultation phase with the clients of Aéroports de Paris conducted in particular within the Economic Consultative Commission for the aerodromes of Paris-Charles de Gaulle and Paris-Orly, and for the aerodrome of Paris-Le Bourget at the end of 2014;
- a dossier published by Aéroports de Paris on 20 January in which the company publicly revealed its proposals for the agreement;
- a public consultation process based on this dossier, between 20 January and 7 March 2015;
- a referral procedure through the French Secretary of State for Transport, Sea and Fisheries with the Minister of Ecology, Sustainable Development and Energy and the airport consultative commission, and an opinion from the same, after hearings with the parties involved, consequently submitted to the Secretary of State on 23 June 2015 and published in the French Official Journal on 27 June 2015.

## Purpose and scope of the Agreement

#### I.1 Purpose of the Agreement

The present agreement has been drawn up pursuant to articles L. 6325-2 of the French Code of Transport and R.224-4 of the French Civil Aviation Code.

In particular, over the period from 2016 to 2020 and in reference to the investment programme scheduled for the regulated scope, it fixes the ceiling for the average rate of change relative to main fees for services rendered. In addition, it sets the quality of service and productivity targets for Aéroports de Paris over this same period.

#### I.2 Term of the Agreement

The present agreement shall come into effect on 1 January 2016 and shall expire on 31 December, 2020.

#### I.3 Regulated scope

Pursuant to article R.224-3-1 of the French Civil Aviation Code and the amended Order of 16 September, 2005 relative to fees for services rendered at aerodromes, the scope of activities of Aéroports de Paris based on which the fair return on the company's capital is appraised, known as the "regulated scope", covers all the activities of Aéroports de Paris at the aerodromes mentioned under article D. 251 of this Code, except for the following:

- at the aerodromes of Paris-Charles de Gaulle and Paris-Orly, ground-handling activities other than those mentioned under Article R. 216-6 of the French Civil Aviation Code;
- activities conducted by companies linked to Aéroports de Paris within the meaning of Decree No. 2015-899 of 23 July, 2015;
- activities for which the financing falls under Article 1609 *quatervicies* of the General Tax Code;
- activities for which the financing falls under Article 1609 *quatervicies A* of the General Tax Code;
- commercial and service activities such as those relating to shops, restaurants, banking and exchange services, hotels, car rental and advertising;
- property and real estate activities outside the terminals other than those consisting of the supply of land, floor space, buildings or premises for:
  - o ground-handling activities,
  - the storage and distribution of aircraft fuel,
  - o aircraft maintenance,
  - o activities related to air cargo,

- o general and business aviation activities,
- o public and subscription car parks,
- public transport;
- other activities unrelated to the activity of the afore-mentioned aerodromes.

## Investments, quality of service and sustainable development

After the creation of major infrastructures during the two previous agreements, the Aéroports de Paris investment programme over the period from 2016 to 2020 will give high priority to the upkeep of existing assets and to regulatory compliance, and will support the growth of traffic through the optimisation of existing facilities and the implementation of service quality standards.

The relations of trust and responsibility between Aéroports de Paris and its clients and partners are entrenched in the conditions of operating security and safety provided, in the robustness and availability of the equipment, facilities and services provided, and in the flawless and smooth continuity of day-to-day operations.

#### **II.1** Investments

While ensuring aeronautical safety, the 2016-2020 investment programme proposed by Aéroports de Paris will make it possible to cope with the increase in traffic and improve operational efficiency for airlines and airports alike. It amounts to €2,978 million (2015 euros), representing a significant increase compared with the 2011-2015 period, due mainly to the increased focus on infrastructure maintenance and optimisation.

The main lines of this programme are as follows:

- The upkeep of assets with maintenance investment designed to deal with the disrepair of not only terminals but also runways and aircraft aprons, along with the maintenance of IT systems and networks in good operating condition; a particularly significant effort focused on the Paris-Orly airport, including most notably the renovation of runways; dedicated operations at Paris-Charles de Gaulle involving the most critical infrastructure and, in particular, the renovation of terminal 2B which is currently closed;
- pursuit of the "One Roof" concept with the completion of three flagship projects: the link-up of the South and West terminals at Paris-Orly, and for Paris-Charles de Gaulle the link-up of terminals 2B and 2D and the link-up of the international satellites in terminal 1;
- enhancing the attractiveness of the hub at Paris-Charles de Gaulle and improving the performance of airport processes in a context of growing competition and the evolving wants and needs of passengers and airlines. These investments focus on the baggage sorting systems in Hall L and Hall M, the apron area for wide-bodied aircraft, the deployment of Visual Docking Guidance System, the refurbishing of the 2E-2F complex, the renovation of lounges and the introduction of automatic self-boarding and baggage deposit desks;
- Regulatory compliance work with particular concern for runways further to the new civil aviation security regulations, and for the water treatment system at Paris-Charles de Gaulle;
- improvements to land access facilities, in particular the westside access roads and the secondary network at Paris-Charles de Gaulle, and the creation of a rear taxi base;
- continued efforts focused on the quality of service after the successful policy conducted over the period from 2011 to 2015, with the implementation of projects focused on improving space and service offering, and priority given to hospitality;

- sustainable development, comprising in particular measures to improve energy efficiency, and a stewardship plan to support the reduction of water consumption;
- continued efforts to adapt the airport's real estate offering, intended to consolidate the positioning of Paris-Charles de Gaulle in the air cargo sector.

The projected timetable for the main operations is as follows:

- Extension of the East Pier opening to the public of the boarding lounge and the extension of the East Pier over the second quarter of 2016;
- Renovation of runway 4 at Paris-Orly over the fourth quarter of 2016;
- Renovation of runway 3 at Paris-Orly:
  - o first phase conducted over the 3rd quarter of 2018,
  - o end of renovation work during the 3rd quarter of 2020;
- Baggage sorting system Hall L (TDS3): opening in the 2nd quarter of 2018;
- Orly New Departure Junction:
  - core and shell making it possible to start up technical lots and interior fitting works in the first quarter of 2018,
  - o opening to the public in the third quarter of 2019;
- Junction of B and D terminals:
  - core and shell making it possible to start up technical lots and interior fitting works in the second quarter of 2019,
  - opening to the public in the summer of 2020;
- Link-up of the satellites in Terminal 1 at Paris-Charles de Gaulle:
  - core and shell of the advanced hub building in order to launch the technical lots and interior fitting works over the secondquarter of 2019,
  - o opening to the public in the fourth quarter of 2020.

The projected investment programme for the regulated scope is given in Appendix 1.

#### II.2 Quality of Service

Improving the quality of service across the Parisian airports was a point of priority under the 2011-2015 ERA. Encouraged by results from the previous period, Aéroports de Paris is committed to pursuing this improvement.

Two categories of indicators entailing financial implications have been introduced:

• "quality standard" indicators relating to service standards provided by all airports regarding their airline clients and passengers. The incentive system associated with these indicators is based solely on a concept of required minimum standard, sanctioned where appropriate by a price penalty. As these indicators relate to the fundamentals expected by public service users, no bonus is applied whenever these objectives are exceeded;

• "excellence" indicators for which the related incentive system is one based on both the concept of required minimum standard, sanctioned by a price penalty, and a notion of high-end ambition, rewarded by a bonus.

In addition to these indicators, Aéroports de Paris is committed to developing a collaborative approach with all stakeholders through which to work on five key themes, revolving around the main issues of each passenger's airport experience: punctuality, hospitality, check-in, baggage delivery and assistance provided to disabled and mobility-impaired people. As part of annual consultations within the economic consultative commission for the airports of Paris-Charles de Gaulle and Paris-Orly, Aéroports de Paris will share the achievements obtained with each of these projects.

#### II.2.1 Quality of Service Indicators

A – The Quality of Service indicators selected under the present agreement and involving objectives that entail financial incentives are as follows:

- Seven "quality standards" indicators, including five availability indicators and two satisfaction indicators:
- Indicator A-1: Electromechanical availability (DEE);
- Indicator A-2: Availability of baggage carousels (DTB);
- Indicator A-3: Availability of aircraft stands (DPS);
- Indicator A-4: Availability of passenger boarding bridges (DPT);
- Indicator A-5: Availability of 400Hz power (D4H);
- Indicator A-6: Satisfaction with cleanliness (SPR);
- Indicator A-7: Satisfaction with orientation (SOR).
  - Three "Excellence" indicators, relating to satisfaction indicators:
- Indicator A-8: Satisfaction with transit (SFC);
- Indicator A-9: Overall satisfaction, departures (SGD);
- Indicator A-10: Overall satisfaction, arrivals (SGA).

B - The Quality of Service Indicators, which will be monitored from the day they are introduced, are specified hereinafter. Aéroports de Paris shall employ all possible means for this date of introduction to take place in the near future. Some of these indicators require a joint measurement process to be established with airlines and ground-handling service providers:

- Indicator B-1: Waiting times at security checkpoints (PIF);
- Indicator B-2: Waiting times at border police checkpoints (PAF);
- Indicator B-3: Baggage delivery times;
- Indicator B-4: Availability of carousel baggage input belts;
- Indicator B-5: Satisfaction with city to airport links.

The definitions and methods of measurement for these indicators will be the subject of information and consultation within the operational committees for quality of service at terminals mentioned under IV.4.

II.2.2 Definition and measurement of service quality indicators

The definitions and methods of measurement for the indicators mentioned under II.2.1-A are given in Appendix 2.

Readings and aggregation of data are carried out by Aéroports de Paris or by third parties operating on its behalf. They are conducted and stored in such a way that the methodology used and the results may be audited by a third party.

#### II.2.3 Quality of Service targets

For each of the indicators mentioned under II.2.1-A, the targets set for Aéroports de Paris SA over the periods defined hereinafter are as follows:

Туре	Indicators	2016	2017	2018	2019	2020
	DEE	95.00%	95.25%	95.50%	95.75%	96.00%
	DTB	98.00%	98.00%	98.00%	98.00%	98.00%
	DPS	94.00%	94.25%	94.50%	94.75%	95.00%
Quality standard:	DPT	95.00%	95.25%	95.50%	95.75%	96.00%
	D4H	97.00%	97.00%	97.00%	97.00%	97.00%
	SPR	3.88	3.90	3.91	3.93	4.05
	SQR	3.71	3.73	3.75	3.76	3.87
Excellence	SFC	3.51	3.52	3.53	3.55	3.57
	SGD	3.66	3.67	3.68	3.70	3.73
	SGA	91.00%	91.25%	91.50%	91.75%	92.00%

For the purposes of the present article, the period "n" as mentioned in the table above relates to the period running from 1 July of the previous year, i.e. "n-1", to 30 June of the current year "n".

However, regarding the availability indicators (DEE, DTB, DPS, DPT, D4H), the period 2016 as mentioned in the table above relates to the period running from 1 January to 30 June, 2016.

Considering the new method of calculation for availability indicators and the ensuing uncertainty over their initial level, a review clause for targets will be generated for each indicator whenever the first year results are outside the median values between targets and the lower and upper limits defined for one and the same period.

Furthermore, in cases where the maximum bonus/penalty for a given indicator is applied two years running, the latter's target level will also be reviewed.

The definitions and methods of review clauses for the indicators mentioned under II.2.1-A are given in Appendix 5.

## Pricing

#### **III.1 Definition of pricing periods**

The five pricing periods relative to the present agreement, subject, if relevant, to V.1.4 (non approval), are as follows:

- 2016 pricing period: 1 April 2016 to 31 March 2017
- 2017 pricing period: 1 April 2017 to 31 March 2018
- 2018 pricing period: 1 April 2018 to 31 March 2019
- 2019 pricing period: 1 April 2019 to 31 March 2020
- 2020 pricing period: 1 April 2020 to 31 March 2021

#### **III.2** Conditions for changes in fee rates

III.2.1 Fees subject to the agreement

The fees which are covered by the present agreement pursuant to article R. 224-4 of the French Civil Aviation Code are as follows, without prejudice to the provisions of III.4 and to the contractual clauses between Aéroports de Paris and clients regarding certain ancillary fees pursuant to section II of article R. 224-2 of the said code:

- the per-passenger fee at Paris-Charles de Gaulle and Paris-Orly airports, in return for the use of facilities developed for the reception of passengers and the general public, to the exclusion of additional services subject to separate fees as at the date of the present agreement coming into effect, and of any new additional service;
- the landing fee at Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget airports, in return for aircraft having the use of the airport infrastructures and facilities required for landing, taking off and taxiing, to the exclusion of additional services subject to separate fees as at the date of the present agreement coming into effect, and of any new additional service;
- the parking fee at the airports of Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget, in return for aircraft having the use of parking infrastructures and facilities, to the exclusion of additional services subject to separate fees as at the date of the present agreement coming into effect, and of any new additional service;
- the fee for the provision of check-in and boarding counters and the handling of local baggage at the Paris-Charles de Gaulle and Paris-Orly airports;
- the fee for provision of baggage sorting facilities for connecting flights in Terminal 1 at Paris-Charles de Gaulle airport, categorised as centralised ground-handling infrastructure, pursuant to Article R. 216-6 of the French Civil Aviation Code;
- the fee for provision of baggage sorting facilities for connecting flights in Terminal 2 at Paris-Charles de Gaulle airport, categorised as centralised ground-handling infrastructure, pursuant to Article R. 216-6 of the French Civil Aviation Code;

- the fee for the provision of fixed electrical supply facilities for aircraft (400Hz and 50Hz) at Paris-Charles de Gaulle and Paris-Orly airports;
- the fee for provision of facilities for the de-icing of aircraft at Paris-Charles de Gaulle airport, categorised as centralised ground-handling infrastructure, pursuant to Article R. 216-6 of the French Civil Aviation Code;
- the computing fee for check-in and boarding for Paris-Charles de Gaulle and Paris-Orly airports;
- the fee for entry passes to restricted areas (badges) at Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget airports;
- the fee for the use of wastewater sieving stations at Paris-Charles de Gaulle and Paris-Orly airports, categorised as centralised ground-handling infrastructure, pursuant to Article R. 216-6 of the French Civil Aviation Code;
- any fee created pursuant to articles III.4.1 and III.4.2, whose pricing conditions, fixed pursuant to these articles and in accordance with III.4.3, may provide for the said fee coming within the scope of fees subject to the price change ceiling defined under III.2.3;
- the fee for assistance provided to disabled and mobility-impaired people at Paris-Charles de Gaulle and Paris-Orly airports.

With the exception of the fee for assistance provided to disabled and mobility-impaired people, the fees mentioned above (hereinafter referred to as "Fees") are subject to the ceiling for change in fee rates stated under III.2.3.

The fee for assistance provided to disabled and mobility-impaired people is set on an annual basis under the conditions provided by the French Civil Aviation Code, by (EC) Regulation No. 1107/2006 concerning the rights of disabled and mobility-impaired people when travelling by air, and by article IV herein, in such a way that the projected revenue from this fee covers the costs assignable to this activity to the fullest extent.

#### III.2.2 Average rate of change in Fee prices

An annual capping system is applied to the average rate of change in Fee prices. This average rate is equal to the price variation for all services concerned, under the conditions defined by article III.2.3 hereinafter.

#### III.2.3.1 Pricing principles and equations

#### A - Principles:

Changes in Fee rates from one pricing period to another are capped by a "base ceiling rate".

These changes are adjusted, if appropriate, by factors linked to observed passenger traffic or to the respect for commitments made by Aéroports de Paris in terms of quality of service, investments and cost control.

The factor linked to traffic may apply as a bonus or penalty should the annual level of the said traffic move outside a predefined buffer zone. The said adjustment may apply as from the 2018 pricing period.

The said ceiling adjustment may apply from time to time in the form of a bonus or penalty to reflect the performance of Aéroports de Paris in terms of quality of service. This adjustment may apply as from the 2017 pricing period.

An adjustment to the said ceiling shall also apply, in accordance with the schedule for high-stake investment operations. This adjustment may apply as from the 2017 pricing period. Furthermore, another ceiling adjustment may apply over the 2020 pricing period in the event of a reduction in the amount of accumulated expenditures from 2016 to 2018, compared with initial forecasts, with respect to the budgets for current investments, quality of service and sustainable development.

Lastly, for the 2020 pricing period, a ceiling adjustment may apply in the event of an overrun of the amount of current expenditures for 2018 compared with initial forecasts, penalising failure to respect the OPEX trajectory set by Aéroports de Paris.

B - For the application of these principles, the price of all services concerned is calculated, based on price scales that are set with a view to each pricing period according to the following procedure:

- Aéroports de Paris draws up a Benchmark Pricing Scale for Fees (GTR) such as:

## $GTR(n,T_{ref}(n)) = GTR(n-1, T_{ref}(n)) \times [1+P(n)])$

where:

- T<sub>ref</sub>(n) is the benchmark for traffic and the use of facilities for pricing period n; this benchmark corresponds to the base parameters for Fees observed over the calendar year n-2 (y-2);
- GTR(i,T<sub>ref</sub>(n)) is the price of all services under consideration, measured by the product resulting from the application of the Fee Benchmark Pricing Scale established for the pricing period i (for 2015, the pricing scale applicable as at 1 April 2015 is given in Appendix 3) at T<sub>ref</sub>(n);
- P(n) is the base ceiling rate for changes in Fee rates specified under III.2.3.2;

- Aéroports de Paris has established an Adjusted Pricing Scale for Fees (GTA) such as:

 $\begin{aligned} & \text{GTA}(n, T_{\text{ref}}(n)) = \text{GTR}(n, T_{\text{ref}}(n)) \text{ X } [1 + \text{TRAF}(n) + \text{QDS}(n) + \text{INV}_1(n)] + \text{OPEX}(n) \\ & + \text{INV}_2(n) \end{aligned}$ 

where:

- GTA(i,T<sub>ref</sub>(n)) is the product resulting from the Adjusted Pricing Scale for Fees over pricing period i at T<sub>ref</sub>(n);
- TRAF(n) is the corrective factor related to traffic, specified under III.2.3.3, liable to apply as from "n" = 2018;
- QDS(n) is the adjustment factor related to quality of service, specified under III.2.3.4, liable to apply as from "n"=2017;
- INV<sub>1</sub>(n) is the adjustment factor related to the high-stake investment schedule, specified under III.2.3.5-A, liable to apply as from "n"=2017;
- INV2(n) is the adjustment factor related to current investment expenditures, quality of service and sustainable development, specified under III.2.3.5-B, liable to apply for "n"=2020;
- OPEX(n) is the adjustment factor related to the change in operational expenses, specified under III.2.3.6, liable to apply for "n"=2020.

- Under the conditions provided in section III of article R.224-4 of the French Civil Aviation Code, Aéroports de Paris shall set Fee rates within the limits of rates in the Adjusted Pricing Scale for Fees.

#### III.2.3.2 Base ceiling rate for change in Fee rates

For each pricing period n, the base ceiling rate for changes to Fee rates, P(n), shall be equal to:

"2016" 1(2016)	
"2017" i(2017) +1.25%	D
"2018" i(2018) +1.25%	D
"2019" i(2019) +1.25%	0
"2020" i(2020) +1.25%	D

where i(n) represents the percentage change in the consumer price index, excluding tobacco, published by the INSEE (IPC 4018 E), calculated as the comparison between the index for the month of August in year "n-1" and the month of August in year "n-2".

III.2.3.3 Adjustment of the Fee increase cap according to traffic

For the purposes of calculating the factor TRAF(n), the quantity of traffic QT(n) is defined as follows:

$$QT(n) = PAX(n-1)$$

where:

 PAX(n-1) is the number of commercial passengers, excluding those in transit, who board and disembark over the period from 1 September in year "n-2" to 31 August in year "n-1" at the airports of Paris-Charles de Gaulle and Paris-Orly. The projected benchmark scenario used in the present agreement relates to a mean annual growth in traffic of 2.5% p.a., with growth of 2.5% in 2016 and 2017, 2.2% in 2018, 2.3% in 2019 and 2.8% in 2020. It leads to the following values  $QT_{ref}(n)$  of factor QT:

Ν	2018	2019	2020
$QT_{ref}(n)$	99,063,000	101,262,000	103,618,000

Furthermore, two sequences QTM(n) and QTm(n) are defined, relating respectively to the high and low limits of a buffer zone, within which the factor TRAF(n) is nil. These limits reflect traffic scenarios whose annual growth rates are respectively 0.5 of a point above or below the baseline scenario.

Ν	2018	2019	2020
QTM(n)	100,402,000	103,132,000	106,048,000
QTm(n)	97,736,000	99,418,000	101,233,000

The factor TRAF(n) is then calculated in such a way that, as from 2018 and beyond the said buffer zone, 50% of the surplus or 20% of the shortfall in the projected income from Fees is offset by the adjustment of Fee rates, limited to an impact of between +0.2 and -0.5 of a point on the annual change to the Adjusted Pricing Scale for Fees.

The method of calculation for the TRAF(n) factor is given in Appendix 4.

#### III.2.3.4 Adjustment of the Fee increase cap according to quality of service

The adjustment factor QDS(n) is based on a bonus/penalty system.

For each "quality standard" indicator mentioned under II.2.1-A and for each year when the targets stated under II.2.3 are applied, a minimum level is set, beyond which the maximum penalty is applied below the objective level, the penalty varies on a straight-line basis down to a minimum level, according to the formulas specified in Appendix 5 to the present agreement.

The penalties associated with each of the "quality standard" indicators are as follows:

- Indicator A-1: -0.04%
- Indicator A-2: -0.04%
- Indicator A-3: -0.04%
- Indicator A-4: -0.04%
- Indicator A-5: -0.04%
- Indicator A-6: -0.04%
- Indicator A-7: -0.04%

For each "excellence" indicator mentioned under II.2.1-A and for each year when the objectives stated under II.2.3 are applied, a minimum level of indicator is set, below which the maximum penalty is applied. Likewise, a maximum level is set, above which the maximum bonus is applied. A buffer zone is also set around the target specified under II.2.3, inside of which the

bonus/penalty figure is nil. On either side of the buffer zone, the bonus-penalty shall vary on a straight-line basis up to the maximum and minimum levels respectively, according to the formulas specified in Appendix 5 to the present agreement. The minimum and maximum levels for each indicator are specified in this Appendix for each year during which they are applied.

The bonuses and penalties associated with each of the "excellence" indicators are as follows:

- Indicator A-8: +0.08% / -0.08%
- Indicator A-9: +0.08% / -0.08%
- Indicator A-10: +0.08% / -0.08%

The methods of calculation for the factor QDS(n) are given in Appendix 5.

III.2.3.5 Adjustment of the Fee increase cap according to the implementation of the investment programme

A - The adjustment factor  $\mathrm{INV}_1(n)$  is representative of adherence to the schedule for high-stake investment operations.

It is based on a system of bonuses and penalties depending on whether the relevant operations are completed ahead of or behind the baseline schedule. These bonuses and penalties are offset against each other yearly, further to which only a potential net penalty is taken into account when calculating the  $INV_1(n)$  factor. The net annual penalty applicable represents at the most -0.1% of overall Fee revenue.

The methods of calculation for the  $INV_1(n)$  factor and those for the underlying ROI indicator (Realisation of Investment Operations) are given in Appendix 6.

To meet the changing needs of clients, a consultation process may be proposed to the economic consultative commission and to the Government for agreement to cancel or defer certain projects concerned by the INV1 factor. The related financial implications would thus become de facto irrelevant.

B - Adjustment factor INV2(n), designed to apply (where relevant) to the pricing period 2020, takes into account a potential reduction in current investment expenditures within the regulated scope with respect to budgets for current investments, competitiveness of the transit hub and airport processes, and investment dedicated to quality of service and sustainable development.

This potential reduction is cumulatively measured over the calendar years 2016 to 2018 inclusive.

In the event that investment expenditure relating to the regulated scope in respect of these budgets were less than 85% of the amount initially planned at the end of 2018, as shown in Appendix 6, 70% of the difference in costs thus incurred regarding the regulated scope and throughout the term of the agreement will be deducted from the fee increase cap for the pricing period 2020. This difference is understood as being in relation to the threshold of 85% of initially scheduled expenditures.

The INV2(n) adjustment factor is equal to:

INV2(2020) = 0.286 x (DC2018 - 0.85 x DP2018) if DC2018 - 0.85 x DP2018 < 0 $INV2(2020) = 0 \text{ if } DC2018 - 0.85 \text{ x} DP2018 \ge 0$  INV2(n) = 0 if  $n \neq 2020$ 

where DC2018 and DP2018 are respectively the expenditures recorded and initially scheduled from 2016 to 2018 in current euros relative to the budgets for current investments, the competitiveness of the transit hub and airport processes, and investments dedicated to quality of service and sustainable development.

The methods of calculation for the INV2(n) factor are given in Appendix 6.

#### III.2.3.6 Adjustment of the Fee increase cap according to movements in operational expenses

The OPEX(n) factor, designed to apply (where relevant) to the 2020 pricing period, takes into account any overrun of Aéroport de Paris operational expenses in 2018.

For the application of the OPEX(n) factor, operational expenses cover all operational expenditures assigned to the regulated scope (net of internal disposals), excluding taxes, external energy expenses, expenses relative to de-icing and winter season services, and to the treatment of disabled and mobility-impaired people. Should 2018 operational expenses be higher than a buffer allowance of 105% of a CP baseline amount for 2018, 50% of the observed difference in costs will, under the conditions of III.2.3.1, be deducted from the ceiling for changes in Fee rates for the 2020 pricing period, limited to an impact of 1% on the annual change to the Benchmark Fee Pricing Scale.

The methods of calculation for the OPEX(2020) factor are given in Appendix 7.

#### **III.3 Pricing policy**

The annual change in rates for each of the fees subject to the present agreement shall be set by Aéroports de Paris in accordance with the stipulations herein, particularly those applicable to the mean rate of change in prices mentioned under III.2.3. Under the conditions scheduled by the French Civil Aviation Code and paragraph IV herein, any said change will each year be the subject of prior consultation within the relevant Economic Consultative Commission and its opinion, and shall be submitted to the Government for approval.

#### III.3.1 Pricing structure

Under the present agreement, Aéroports de Paris expects in particular to put the following proposals up for consultation with the Economic Consultative Commission:

- under the conditions stated in items III.2.3.1 and III.4.1, a standardisation of pricing conditions for fees relative to the handling of connecting flight baggage;
- under the conditions stated in item III.2.3.1, the integration, with the landing fee, of the fixed portion of the fee for the provision of facilities for the de-icing of aircraft at Paris-Charles de Gaulle airport, said fixed portion corresponding to the use by aircraft of the de-icing infrastructures at Paris-Charles de Gaulle and Paris-Orly airports insofar as these facilities pertain to an infrastructure needed for landing, take-off and taxiing. The variable portion of the fee for the provision of de-icing facilities for aircraft at the airport of Paris-Charles de Gaulle would be retained.

Furthermore, Aéroports de Paris plans to engage an annual consultation process within the Economic Consultative Commission, proposing to examine, after five years of pricing structure stability and in light of the structural changes affecting traffic since 2011, the opportunity to re-evaluate the balance of the spread between principal fees, lowering the weight of passenger fees

in relation to the main fees applied to aircraft movements (landing fee and parking fee), together with the weighting of tonnage and movement bases of the landing fee.

#### III.3.2 Adjustments for reasons of public interest

Under the present agreement, Aéroports de Paris expects to propose a consultation process within the Economic Consultative Commission, under the conditions and limitations defined below, for the introduction of a pricing adjustment system, stimulating the development of traffic and the better use of infrastructures.

Throughout the present agreement, should Aéroports de Paris exercise its option to implement price adjustments for reasons of public interest mentioned under article R.224-2-2 of the French Civil Aviation Code, other than those adjustments aimed at reducing or offsetting environmental damage, these adjustments would be subject to the following limitations:

- The reduction in fee rates per passenger for the portion applied to "point-to-point" passengers, designed to encourage the development of traffic and improve the use of infrastructures at Paris-Charles de Gaulle and Paris-Orly, could not apply over any period running beyond the year during which the development of traffic is observed; for each air carrier, the amount may not exceed 30% of income from the fee applied to "point-to-point" passengers and corresponding to the activity of the said air carrier; furthermore, this reduction would, for all carriers combined, be limited to an overall amount of €5 million p.a. (2015 value with an annual rise in this ceiling equal to the average rate of change in Fee prices). The pricing scales mentioned under III.2.3.1 are established without taking into account the effects of this adjustment to rates;
- The reduction in fee rates per passenger for the portion applied to transit passengers, designed to encourage the development of traffic and improve the use of infrastructures at Paris-Charles de Gaulle and Paris-Orly, could not apply over any period running beyond the year during which the development of traffic is observed; for each air carrier, the amount may not exceed 30% of income from the fee applied to transit passengers and corresponding to the activity of the said air carrier; furthermore, this reduction would, for all carriers combined, be limited to an overall amount of €5 million p.a. (2015 value with an annual rise in this ceiling equal to the average rate of change in Fee prices). The pricing scales mentioned under III.2.3.1 are established without taking into account the effects of this adjustment to rates;
- The reduction in fee rates for parking, designed to encourage better use of infrastructures at Paris-Charles de Gaulle and Paris-Orly for the benefit of contact parking over a period not exceeding 45 minutes; the amount of the reduction, for each air carrier, may not exceed, on the one hand, 50% of fee income corresponding to the activity of the air carrier for contact parking (fixed portion and variable portion) and, on the other hand, 30% of income from the parking fee corresponding to the global activity of the said air carrier. This reduction may not apply over a period running beyond the year during which the improvement in the use of infrastructures is observed and would, furthermore be limited to an overall amount of €5 million p.a. for all carriers combined (2015 value with an annual rise in this ceiling equal to the average rate of change in Fee prices). The pricing scales mentioned under III.2.3.1 are established without taking into account the effects of this adjustment to rates.

These reductions do not give rise to any compensation, neither under the present agreement nor under annual pricing decisions. Consequently, for the application of the pricing equations given under III.2.3, these reductions are not taken into account.

Over the period of the present agreement, two other price adjustments for reasons of public interest may be considered and would be subject to the limitations as follows:

- A reduction in fee rates for parking going as far as total exemption designed to encourage the development of traffic and better use of infrastructures at Paris-Charles de Gaulle and Paris-Orly. It may not apply over a period running beyond the year during which the development of traffic is observed; this reduction would be limited to all parking made between 11pm and 7am local time, and would be offset by re-evaluating day-time parking, providing, in theory, identical revenue for Aéroports de Paris. The pricing scales mentioned under III.2.3.1 are established taking into account the effects of this adjustment to rates;
- An adjustment of fee rates for assistance to disabled and mobility-impaired people, designed to encourage better use of infrastructures at Paris-Charles de Gaulle and Paris-Orly in accordance with notification delays on the part of airline companies. This adjustment may not exceed a deviation of 1 to 4 between the price relating to the lowest notification delay and the price relating to the highest notification delay. This adjustment could not apply over a period running beyond the year during which the improved use of traffic infrastructures is observed.

Furthermore, it is hereby recalled that Aéroports de Paris may, under the conditions scheduled by the French Civil Aviation Code and the application texts related thereto, implement adjustments to fees aimed at reducing or offsetting damage to the environment.

Whatever the objective set by adjustments to fees, any creation of a new adjustment or any substantial change made to an existing adjustment will be the subject of an impact study pursuant to article R.224-2-2 of the French Civil Aviation Code, which will be submitted to the competent Economic Consultative Commission prior to any decision.

To be sure of respecting community regulations relative to Government aid, Aéroports de Paris shall provide prior evidence to the Government to demonstrate that it is acting as a market economy operator via the implementation of these measures.

#### **III.4** Changes in the scope of fees

#### III.4.1 Modification of pricing terms and conditions for existing services

A - The conditions of B and C hereinafter shall apply if, during the course of the present agreement, Aéroports de Paris plans to:

- create a new fee for the remuneration of airport public services (within the meaning of article R.224-1 of the French Civil Aviation Code) existing at the date of the signature hereto;
- transfer the remuneration of an airport public service from one of the fees mentioned under III.2.1 to a fee whose price conditions are fixed by contract with clients;
- transfer the remuneration of an airport public service from a fee whose price conditions are fixed by contract with clients to fees whose rates are fixed by decision from Aéroports de Paris.

B - Aéroports de Paris, after receiving the opinion of the Economic Consultative Commission, shall present the Government with proposals for ways and means to adjust changes to fees so that the new situation, as at the date of the proposal, has a neutral effect on expected income over the remaining term of the agreement. The implementation of the proposal from Aéroports de Paris shall be submitted for clearance from the Government. The Government, represented by the French Minister for Civil Aviation, shall notify Aéroports de Paris of its position within one month following the notification of the proposal accompanied by the opinion of the Economic Consultative Commission. After this one-month period, absence of reply from the Government shall be seen as acceptance of the proposal from Aéroports de Paris.

C - As an exception, B shall not apply to the last paragraph of A when concerning fees mentioned under III.2.1 whose price conditions are fixed by contract with clients; in this case, the equations of III.2.3.1 are applied, without prejudice to the Government approval scheduled under III of the article R.224-4 of the French Civil Aviation Code.

#### III.4.2 New services or cost variations

A - The conditions of B hereinafter shall apply if any of the following cases arise in the course of the agreement:

- in the event that Aéroports de Paris has to resort to fees coming under article R.224-1 of the French Civil Aviation Code and representing for the company an annual cost of over €5 million (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August) to remunerate services that hitherto were remunerated by income from outside this scope;
- in the event that, on account of new legislative or regulatory provisions specific to airport operators, through a governmental decision or at the request of air carriers, Aéroports de Paris should be required to provide new airport services coming under article R.224-1 of the French Civil Aviation Code representing a clear variation in annual costs of over €5 million (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August);
- in the event that, on account of new legislative or regulatory provisions specific to airport operators or through a governmental decision, Aéroports de Paris is relieved of its airport services under article R.224-1 of the French Civil Aviation Code;
- in the event that, on account of new legislative or regulatory provisions specific to airport operators or through a governmental decision, the annual costs or income of Aéroports de Paris for the regulated scope are caused to rise or to fall by more than €2 million (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August);
- in the event that, on account of new legislative or regulatory provisions not specific to airport operators, the annual costs or income of Aéroports de Paris for the regulated scope are caused to rise or to fall by more than €5 million (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August).

B - Aéroports de Paris, after receiving the opinion of the Economic Consultative Commission, presents the Government with proposals for ways and means to adjust changes to fees in order to offset projected deviations in income or costs, fair return on invested capital included, for the regulated scope. The implementation of the proposal from Aéroports de Paris shall be submitted

for clearance from the Government. The Government, represented by the French Minister for Civil Aviation, shall notify Aéroports de Paris of its position within one month following the notification of the proposal accompanied by the opinion of the Economic Consultative Commission. After this one-month period, absence of reply from the Government shall be seen as acceptance of the proposal from Aéroports de Paris.

For the application of the present B in the cases mentioned in the last two paragraphs of A, compensation shall refer to the projected deviation in relation to the mentioned thresholds.

#### III.4.3 System for certain new fees

A - Whenever a new fee is introduced pursuant to III.4.1 or III.4.2, representing annual revenue in excess of  $\in$ 5 million (2015 value, indexation on the consumer price index, excluding tobacco - IPC 4018E - of the month of August), it shall necessarily fall within the field of fees subject to the increase cap stated under III.2.3.

B - In the event that Aéroports de Paris has to provide new airport services coming under article R.224-1 of the French Civil Aviation Code or has to use such fees to remunerate services which hitherto were remunerated by income from outside this scope, representing for the company an annual cost of less than €5 million (2015 value, indexation on the consumer price index, excluding tobacco - IPC 4018E - of the month of August), Aéroports de Paris shall be authorised to create new fees, not covered by the present agreement, established on an annual basis in such a way that the projected revenue thus generated covers the net costs assignable to these services to the fullest extent.

#### III.4.4 The effect of a change in the investment programme

A - Under the annual consultation process within the relevant Economic Consultative Commission, Aéroports de Paris may propose, at its own initiative and to meet the changing needs of clients, to conduct one or more new investment operations for capacity or for the restructuring of existing facilities, or to anticipate one or more such operations (in relation to the investment programme given in Appendix 1).

Should traffic exceed 102% of the QTM(n) sequence described under III.2.3.3, 50% of the surplus income from Fees beyond the buffer zone may help to cover the annual costs resulting from these investments, including fair return on invested capital determined in respect of the weighted average cost of capital. This threshold corresponds to the following QTs(n) values of the QT(n) parameter defined under III.2.3.3:

N 2018		2019	2020		
QTs(n)	102,410,000	105,195,000	108,169,000		

In other cases, or if this share of surplus income is insufficient, Aéroports de Paris may consider, under the aforementioned consultation process, ways and means for an annual Fee adjustment in order to cover projected deviations in annual costs, including fair return on invested capital determined in respect of the weighted average cost of capital, further to this development in the investment programme.

If the provisions of the present A are exercised, the implementation of the proposal from Aéroports de Paris for the development of the investment programme and annual Fee adjustment, in accordance with the principles above and after receiving the opinion of the Economic Consultative Commission, shall be submitted for Government approval. The Government, represented by the French Minister for Civil Aviation, shall notify Aéroports de Paris of its position within one month following the notification of the proposal accompanied by the opinion of the Economic Consultative Commission. After this one-month period, absence of reply from the Government shall be seen as acceptance of the proposal from Aéroports de Paris.

Additionally, Aéroports de Paris shall inform the Government of its intention to conduct one or more new investment operations for capacity or for the restructuring of existing facilities, or to anticipate one or more such operations, at the earliest possible moment and even before consultation with users.

B - Under the annual consultation process within the relevant Economic Consultative Commission, Aéroports de Paris may propose, at its own initiative and to meet the changing needs of clients, not to conduct one or more new investment operations for capacity or for the restructuring of existing facilities given in the investment programme in Appendix 1, or to defer one or more such operations.

Should traffic be 98% lower than the QTm(n) sequence described under III.2.3.3, 50% of the shortfall in income from Fees below the buffer zone may offset the drop in annual costs resulting from the non completion or deferral of these investments, including fair return on invested capital determined in respect of the weighted average cost of capital. This threshold corresponds to the following QTi(n) values of the QT(n) parameter defined under III.2.3.3:

N 2018		2019	2020		
QTi(n)	95,781,000	97,429,000	99,208,000		

In other cases, or if this share of shortfall in income is lower than the reduction in costs generated by the withdrawal or the deferral of the operations concerned, Aéroports de Paris may consider, under the aforementioned consultation process, ways and means for an annual Fee adjustment in order to offset the projected drop in annual costs, including fair return on invested capital determined in respect of the weighted average cost of capital, further to this development in the investment programme.

If the provisions of the present B are exercised, the implementation of the proposal from Aéroports de Paris for the development of the investment programme and annual Fee adjustment, in accordance with the principles above and after receiving the opinion of the Economic Consultative Commission, shall be submitted for Government approval. The Government, represented by the French Minister for Civil Aviation, shall notify Aéroports de Paris of its position within one month following the notification of the proposal accompanied by the opinion of the Economic Consultative Commission. After this one-month period, absence of reply from the Government shall be seen as acceptance of the proposal from Aéroports de Paris.

Additionally, Aéroports de Paris shall inform the Government of its intention not to conduct one or more new investment operations for capacity or for the restructuring of existing facilities, or to defer one or more such operations, at the earliest possible moment and even before consultation with users.

# III.4.5 The effect of a change in asset and expense allocation methods between the regulated scope and the other activities of Aéroports de Paris

Any change in asset, income and expense allocation methods between the regulated scope and other activities, compared with those stated in Appendix 8, shall be the subject of a memorandum within the process of the annual meetings of the Economic Consultative Commission and then be submitted to the Government for approval. The Government, represented by the French Minister for Civil Aviation, shall notify Aéroports de Paris of its position within one month following the notification of the proposal accompanied by the opinion of the Economic Consultative Commission. After this one-month period, absence of reply from the Government shall be seen as acceptance of the proposal from Aéroports de Paris.

If the effect of this development is to improve the rate of return on capital invested within the regulated scope, Aéroports de Paris shall consider, under the process of annual consultations within the relevant Economic Consultative Commission, ways and means for an annual Fee adjustment in order to offset the improvement in the rate of return on invested capital within the regulated scope further to this change in method.

The related consultation process shall be accompanied by the performance of an impact study on assets, income, expenses and return from the regulated scope.

## Consultation and cooperation with clients

In order to improve the quality of services rendered to clients and to best meet their needs in a cost-effective manner, Aéroports de Paris undertakes to implement an in-depth consultation process and greater operational field cooperation with aviation clients.

In particular, regarding the Paris-Charles de Gaulle and Paris-Orly airports, Aéroports de Paris undertakes to maintain, jointly with air carriers, the operational committees for quality of service in terminals, charged with the definition and implementation of combined action plans for the continuous improvement of the quality of services rendered to all clients.

#### **IV.1** Economic Consultative Commission

The Economic Consultative Commission is a privileged forum for information and consultation between Aéroports de Paris and its aviation clients on the airport public service rendered by the company, in particular the quality of service, airport investments and fee rates. Aéroports de Paris shall convene the relevant Economic Consultative Commission at least once a year to debate these questions.

Pursuant to article R. 224-3 and to item III of article R. 224-4 of the French Civil Aviation Code, Aéroports de Paris shall in particular convene the commission prior to each new pricing period. Without prejudice to more demanding legislative or regulatory obligations, Aéroports de Paris shall submit to members of the commission the relevant preparatory documents at least four months ahead of the meeting.

Without prejudice to legislative or regulatory provisions relative to the Economic Consultative Commission, the latter shall receive the following elements:

- in terms of finance:

- the operating account for the regulated scope over the last known financial year;
- the value of the regulated asset base over the last known financial year;
- the operating account over the last known financial year concerning the scope of airport public services mentioned under article R.224-1 of the French Civil Aviation Code;
- the value of the asset base relating to this same scope;
- if appropriate, the financial projections made public by Aéroports de Paris concerning the financial year ahead of the last known financial year, and the financial year during which the new pricing period comes into effect;
- the rate of return on invested capital for the regulated scope over the last known financial year.

- in terms of investments:

- a progress report on the ongoing investment programme along with the updating of this programme until the expiry of the agreement, and forecasts on annual investment expenditures for the next five financial years, clearly distinguishing each operation of more than €20 million. This report shall highlight any transactions that have not been

carried out or that have been deferred, along with the new non-scheduled or anticipated transactions compared with the investment programme given in Appendix 1;

- information on the use of airport infrastructures and facilities over the last known period;
- information on changes to the general facility condition index per airport;
- the expected results from any major investment proposed in terms of capacity;
- projections from Aéroports de Paris for the investment programme over the five years following the present financial year;

- in terms of traffic:

- traffic figures over the last known financial year, clearly distinguishing, for each airport, between the number of passengers in each band domestic, Schengen area, EU ex Schengen, overseas and international -, the number of transit passengers, cargo and postal delivery tonnage, landing weight (sum of certified maximum take-off weight for incoming flights) and the number of movements;
- global assumptions from Aéroports de Paris until the expiry of the present agreement;

- in terms of quality of service:

- the results of measurements, aggregated per quarter and per year, for each indicator mentioned under II.2.1-A and II.2.1-B, together with an explanation for deviations from targets;

- in terms of fees for services rendered:

- the items stipulated under article R. 224-3 and item III of article R.224-4 of the French Civil Aviation Code, and those provided for by the Order of 16 January 2012, relative to the forwarding of information prior to the setting, at certain aerodromes, of the fees stated under article R. 224-1 of the French Civil Aviation Code;
- an analysis of the match between proposed rates and the provisions of III.2 and III.4.

#### IV.2 Monitoring of major investment transactions

Aéroports de Paris undertakes to offer users, as soon as possible, systems through which to consult them on the subject of ongoing or projected major investment transactions, particularly in terms of characteristics and progress.

#### IV.3 Launch of new operations

Before committing to a new investment project likely to impact the period subsequent to that of the present agreement, whose amount is 15% higher than the revenue from the regulated scope over the last known financial year, Aéroports de Paris undertakes to consult with users beforehand by way of annual consultations conducted within the Economic Consultative Commission.

#### IV.4 Operational committees for quality of service in terminals

In order to strengthen operational field cooperation with aviation clients aimed at the continuous improvement in the quality of services rendered to professional players, passengers and the public, Aéroports de Paris undertakes to implement (or, where appropriate, to maintain jointly

with air carriers or their representatives), operational committees for the quality of service in terminals.

Each committee, related to a specific terminal or uniform group of terminals, is asked to convene on a quarterly basis or more frequently at the initiative of committee members. Prerogatives include the development and monitoring of joint action plans aimed at customer satisfaction between Aéroports de Paris and air carriers operating in the terminal concerned, along with the examination of investment programmes.

In particular, each committee shall have a list of quality of service indicators, comprising in particular the indicators provided under II.2.1-A and II.2.1-B developed in specific relation to the terminal concerned.

## Terms of performance of the agreement

#### V.1 Information and control

#### V.1.1 Information to be supplied by Aéroports de Paris

In addition to the information provided under item III of article R.224-4 of the French Civil Aviation Code, Aéroports de Paris shall provide the General Board of Civil Aviation and the Senior Board for Competition, Consumer Activity and Fraud Control with the following items every year:

- in terms of finance:

- the operating account for the regulated scope over the last known financial year;
- components of the fixed asset base and an estimation of the working capital requirement as at the end of the last known financial year;
- the rate of return on invested capital for the regulated scope over the last known financial year;
- a progress report on the ongoing investment programme along with the updating of this programme until the expiry of the present agreement, singling out transactions of more than €20 million;
- in order to check the proportionate nature of fees in relation to corresponding costs for the last known financial year:
  - the following items relative to the scope of airport public services mentioned under article R.224-1 of the French Civil Aviation Code, produced by the cost accounting mentioned under article 59 of the Aéroports de Paris specifications: the operating account, components of the fixed asset base, and an estimation of the working capital requirement,
  - these same items relative to each of the fee categories mentioned under article R.224-2 of the French Civil Aviation Code;
- computerised data with which to check compliance with the price increase formulas used in Pricing Scales;
- monitoring of the allocation of assets, income and expenses between the regulated scope and the other activities of Aéroports de Paris, along with the main parameters on which this spread is based, in particular the surface areas allocated to different activities and the weighting factors applied to these surfaces and their calculation.
- for any investment for capacity and any investment project exceeding €60 million or included in a consistent group of projects exceeding €60 million, the projected spread of assets and expenses between the regulated scope and the other activities of Aéroports de Paris, along with the main parameters on which this spread is based, in particular the surface areas allocated to different activities and the weighting factors applied to these surfaces and their calculation.

- in terms of traffic:

- traffic figures over the last known financial year, clearly distinguishing (for each airport) between the number of passengers in each band - domestic, Schengen area, EU ex

Schengen, overseas and international -, the number of transit passengers, cargo and postal delivery tonnage, landing weight (sum of certified maximum take-off weights for incoming flights) and the number of movements;

- the corresponding assumptions from Aéroports de Paris until the expiry of the present agreement, with the exception (where applicable) of cargo tonnage and postal delivery;

- in terms of quality of service:

- the results of measurements, aggregated per quarter and per year, for each indicator mentioned under II.2.1-A and II.2.1-B, together with an explanation for deviations from targets.

Where appropriate, this information is specified at the request of the Government, after consultation with Aéroports de Paris, within the framework of Government needs relative to economic regulation.

The information provided to the Government pursuant to the present article, other than that made known to the Economic Consultative Commission or that made public by Aéroports de Paris, shall be covered by business confidentiality within the meaning of the French Code of Commerce.

#### V.1.2 Monitoring committee

A monitoring committee for the present agreement, established between Aéroports de Paris, the services of France's Direction Générale d'Aviation Civile and those of the Directorate General for competition, consumer activity and fraud control, convened at the request of one of these parties, shall examine in particular the development of investment programmes and of traffic and quality of service over the period covered by the present agreement.

It is informed of Aéroports de Paris' multi-annual guidelines concerning the structural evolution of the fee rates covered in the present agreement. Aéroports de Paris shall provide the committee with computerised data with which to check compliance with the price increase formulas used in Pricing Scales.

It shall examine the results, per terminal and per month or quarter depending on the case, of each quality of service indicator mentioned under II.2.1.

#### V.1.3 Auditability

Aéroports de Paris undertakes to ensure that all the information supplied to the Government under the performance of the present agreement, along with the methods used to collect it, shall be available at any time for auditing missions led by the Government. Aéroports de Paris shall be informed of auditing decisions by the Government with prior notice of at least one month. It shall be informed of the results obtained.

Audits shall be performed according to the terms selected by the Government and at its expense.

#### V.1.4 Non-approval of prices

In the event of non-approval of prices, pursuant to the last paragraph of item III of article R.224-4 of the French Civil Aviation Code, Aéroports de Paris may proceed with a new proposal in application of the procedure mentioned under this item III. In this case, on the one hand, rates from the previous pricing period shall remain in effect until the new rates are approved, and, on the other hand, the opening of the pricing period concerned shall be deferred accordingly with no change to the term thereof.

The new proposal from Aéroports de Paris may take into account the shortening of this pricing period in such a way as to re-establish projected income equivalent to income that would have resulted from the application, over the initial term, of the rate pricing period in compliance with the present agreement. In this case, the pricing scale serving as a benchmark for calculating the fee increase cap over the following pricing period shall not take into account the adaptation of the effective rates induced by this situation.

#### V.2 Review or early termination of the agreement

#### V.2.1 Special circumstances justifying a review of the agreement

A - Should any of the following conditions arise, the Parties agree to examine the necessity to review the agreement under the terms and conditions set under B:

- in the event that the quantity of traffic, measured by the indicator QT(n) defined under III.2.3.3, exceeds the value QTMM(n) defined below for three years running, or remains below the value QTmm(n) for three years running;

n	2017	2018	2019	2020
QTMM(n)	98,420,000	102,876,000	107,215,000	111,856,000
QTmm(n)	94,837,000	95,336,000	95,548,000	95,858,000

The markers QTMM(n) and QTmm(n) relate to traffic scenarios where annual growth is respectively 4.5% and 0.5% p.a.

- in the event that, after the calendar years subsequent to 2016, investment expenditures within the regulated scope, accumulated since 1 January 2016, fall short of 75% of the amount mentioned in Appendix 1.

B - At the request of one of the Parties which considers that the new situation reflects a substantial change in the economic conditions of the agreement, both parties agree to seek an amicable settlement over the principle and the procedure for reviewing the present agreement.

In the event of an amicable settlement, both Parties shall review the agreement within a period of two months from the date of the opinion given by the airport consultative commission as per article R.224-4 of the French Civil Aviation Code.

If an amicable settlement cannot be reached within two months following the applicant Party's request, the Minister for Civil Aviation shall convene the airport consultative commission within two weeks to study the principle and procedure for reviewing the agreement.

If the airport consultative commission is of the opinion that a review of the agreement is necessary, the review procedure shall be conducted in compliance with this opinion and the Parties shall review the agreement within a period of two months from the date of the opinion given by the airport consultative commission.

#### V.2.2 Exceptional and unforeseeable circumstances

At the request of one of the Parties which considers that exceptional and unforeseeable circumstances, other than those mentioned under V.2.1 and leading to a disruption of the economics of the agreement, require a review or the termination thereof, the Parties shall agree to seek an amicable settlement regarding the necessity of a review or early termination of the agreement. In the event of an amicable agreement regarding a review, the Parties shall also decide on the preparation procedure.

If an amicable settlement cannot be reached within one month following the applicant party's request, the Minister for Civil Aviation shall convene the airport consultative commission within two weeks to study the principle and procedure for a review or early termination of the agreement. If the airport consultative commission is of the opinion that a review or early termination of the agreement is necessary, the Minister for Civil Aviation shall order a review of the agreement or early termination thereof according to the terms and conditions recommended by the said commission.

In the event of early termination of the agreement and unless otherwise agreed by the Parties, fee rates shall remain in effect until the end of the pricing period determined by the agreement.

## Miscellaneous provisions

#### **VI.1** Penalties

In the event that Aéroports de Paris applies unapproved fees pursuant to article R.224-4 of the French Civil Aviation Code, the company shall be liable to a financial penalty, under the conditions laid down by article R.224-4-3 of said code (i.e. in particular after the opinion of the airport consultative commission). Within the limits set under article L. 6325-5 of the Code of Transport, the amount of this penalty shall be equal to 120% of the difference between the annual income resulting from applied rates and that resulting from approved rates.

#### VI.2 Preparation of the next agreement

The Parties agree on the benefits of preparing a regulation agreement over a multi-annual period following the term of the present agreement.

Aéroports de Paris undertakes to publish, no later than 1 May 2020, the consultation file relative to this fourth regulation agreement. In this regard, Aéroports de Paris will start the prior consultation within the competent Economic Consultative Commission no later than November 2019.

These undertakings shall remain valid in the event of an early termination of the present agreement, if need be using a timetable adjusted to the circumstances.

#### VI.3 Forwarding of notices

Notices from Aéroports de Paris to the Government pursuant to the present agreement shall be forwarded to the following address:

Direction générale de l'aviation civile / Direction du transport aérien - 50, rue Henry Farman - 75720 Paris Cedex 15.

#### VI.4 Advertising

Pursuant to article R.224-4 of the French Civil Aviation Code, the present agreement is to be rendered public. Accordingly, the Direction Générale de l'Aviation Civile is responsible for publishing the agreement in the official gazette of the Ministry for Ecology, Sustainable Development and Energy.

Signed in Paris, 31 August 2015

Chairman and CEO of Aéroports de Paris On behalf of the Ministry for Ecology, Sustainable Development and Energy

by delegation,

Director General for Civil Aviation

AUGUSTIN DE ROMANET

PATRICK GANDIL

## APPENDICES

Appendix 1 The investment programme for the regulated scope over the agreement period	36
Appendix 2 Definition and method of calculation of service quality indicators	38
Appendix 3 Fee scale as at the date of signature of the agreement	61
Appendix 4 Method of calculation for the TRAF factor	68
Appendix 5 Method of calculation for the QDS factor	69
Appendix 6 Method of calculation for the INV1 and INV2 factors	73
Appendix 7 Method of calculation for the OPEX factor	79
Appendix 8 Methods for the allocation of assets, income and expenses between the regulated scope and other activities	80

## **APPENDIX 1**

## The investment programme for the regulated scope over the agreement period

Amounts in € millions 2015 - Regulated scope	2016	2017	2018	2019	2020	Total 2016-2020
Maintenance of assets						77
Renovation of Terminal 2B, Paris-Charles de Gaulle	2	22	29	23	0	// 27
Current investments - Paris-Charles de Gaulle	97	102	81	86	82	448
Rehabilitation of runway 2	26	0	0	0	0	26
Other operations - Paris-Charles de Gaulle	71	102	81	86	82	422
Current investments - Paris-Orly Renovation of aprons and taxiwavs	<b>99</b>	72 16	75 5	10	<b>87</b> 10	<b>409</b> 42
Renovation of runway 3	1	11	11	12	0	36
Renovation of runway 4 Renewal of waterproofing and strengthening of Bridge 2	35	0 15	0 12	0	0	35 27
Other operations - Paris-Orly	62	29	46	55	77	269
Current Investments - Le Bourget	2	2	1	1	2	8
Current Investments Aeronautical real estate	3	3	4	4	4	17
IT networks and systems	13	13	13	13	13	63
Total Maintenance of assets	216	214	208	211	198	1 048
Regulatory upgrade						105
Regulatory purchases, runways Paris-Charles de Gaulle	8	<b>8</b> 0	<b>40</b> 32	<b>40</b> 32	<b>8</b> 0	105 64
Paris-Orly	8	8	8	8	8	41
Rain water	0	0	0	14	29	43
Other purchases for regulatory upgrades	1	3	3	0	0	8
Total Regulatory upgrade	9	12	44	54	38	156
Capacity optimisation and One-Roof concept	101		100			
Link-up of the South and West terminals, Paris-Orly	101	99	103	47	31	382
Link-up of terminals 2B and 2D at Paris-Charles de Gaulle	3	23	38	33	0	97
Link-up of the Terminal 1 satellites at Paris-Charles de Gaulle	19	19	19	19	19	97
Paris-Charles de Gaulle	3	1	9	7	4	21
Le Bourget	1	0	2	7	4	14
Air terminal projects, Paris-Orly	2	15	12	3	0	33
Preparatory work, T4	0	0	7	7	7	20
Capacity optimisation and One-Roof concept	129	157	189	124	65	663
Access improvement					0	44
CDG Val	5	5	0	0	0	11
Relocation of the rear taxi base at Paris-Charles de Gaulle	9	2		5	5	31
Miscellaneous nroiects Paris-Orly	6	2	3	0	0	10
Total access improvement	33	9	13	5	5	64
Compatitiveness of the transit hub and other processes				Ŭ		0.
Terminals	28	20	8	3	2	60
Paris-Charles de Gaulle	23	16	5	0	0	43
Palls-Olly	18	4	ى 18	ى 18	- 2	80
Aeronautical aprops and taxiways	0	16	18	18	14	65
Securing the two parallel northern runways (Paris-Charles de Gaulle)	0	16	8	8	0	33
Aprons for large aircraft (Paris-Charles de Gaulle)	0	0	9	9	9	28
	14	12	13	24	17	79
Paris-Charles de Gaulle	6	6	6	21	13	53
Paris-Orly	8	6	6	3	4	27
Baggage sorting systems	44	53 41	65 31	41	21	224
TBS4 (Paris-Charles de Gaulle)	41	10	31	41	21	103
Other projects - Paris-Charles de Gaulle	3	2	4	0	0	8
Change in flows	10	2	4	3	2	21 10
Paris-Charles de Gaulle	2	2	4	2	2	2
IT projects	21	21	21	21	21	106
Total competitiveness of the transit hub and other processes	135	142	146	127	94	644
Quality of service and sustainable development						
Sustainable development	10	7	11	5	11	44
Quality of Service	32	31	30	29	29	151
Total Quality of service and sustainable development	41	38	41	34	40	195
Aeronautical real estate development	0.1	00		00	40	400
Faris-Oriaries de Gaulle Paris-Oria	31	22	41	20	18	132
l a Bournat	30	13	10	9	0	42
Total Aeronautical real estate development	69	41	-51	29	- 18	208
	624	612	602	594	457	200
	- 031	012	093	564	437	29/8
For the performance monitoring of the present agreement and pursuant to V.2.1-A, the deviation between investment expenditures in constant 2015-value euros and those in current-value euros is determined using the composite index hereinafter:

$$IC_n = 0.5 \frac{BT01_n}{BT01_{2015}} + 0.1 \frac{TP01_n}{TP01_{2015}} + 0.3 \frac{BT50_n}{BT50_{2015}} + 0.1 \frac{SYNTEC_n}{SYNTEC_{2015}}$$

where:

- BT01<sub>n</sub> is the Building general index for all trades as published by INSEE (BT01) May value of year "n",
- TP01<sub>n</sub> is the Public Works general index for all works, as published by INSEE (TP01) May value of year "n",
- BT50<sub>n</sub> is the Renovation-Maintenance general index for all trades as published by INSEE (BT50) May value of year "n",
- SYNTEC<sub>n</sub> is the index measured by the SYNTEC federation representing changes in price for service performance, especially engineering and IT May value of year "n".

If one of these indices is no longer available in the course of this agreement, Aéroports de Paris will suggest a replacement index to the Government. This proposal is submitted for Government approval within one month from the notification thereof. After this period, it shall be deemed to be accepted.

## **APPENDIX 2**

Definitions and methods for measuring service quality indicators

#### ELECTROMECHANICAL AVAILABILITY INDICATOR (DEE) (Indicator A-1)

## 1. Field covered by the indicator:

The different types of electromechanical equipment are as follows:

- lifts made available to the public, including platforms for disabled persons;
- goods elevators that are a part of the route taken by passengers or their baggage;
- belts and travelators;
- escalators.

The equipment concerned is that in terminals destined for passengers at the airports of Paris-CDG and Paris-Orly.

For purposes of consistency, equipment at the SNCF station of Roissypôle and the TGV station, the lifts in the Exchange Module at Paris-Charles de Gaulle and the lifts and escalators at the stations of Orlyval at Orly South and Orly West, and of CDGVal at CDG, are not included within this scope.

The overall list of selected equipment, that taken into account and that not taken into account (in particular where work is scheduled and respecting a 30-day prior notice period) is established for each month and archived as specified under the Data Archiving section. New equipment is taken into account after a regular duty verification period of three months after commissioning.

## 2. Methods of measurement for calculating the indicator

The indicator is the ratio between real operating time and theoretical operating time.

## Theoretical operating time:

For each terminal, the theoretical operating time of electromechanical equipment is calculated based on a time span of 24 hours for Paris (CDG) and 18 hours (6am to midnight) for Paris-Orly.

#### Real operating time:

The real operating time of equipment is equal to the theoretical operating time, minus the following downtimes:

- Downtimes (fault condition) linked to any primary failure (intrinsic cause) of the facility;
- Downtimes scheduled for preventive maintenance such as "systematic preventive maintenance" and "conditional preventive maintenance";
- Downtimes caused by facility cleaning operations;
- Downtimes for modification, improvement and reconstruction works or for compliance with a regulation, which may require the neutralisation of the equipment's access perimeter and which have not been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have not been notified within this same period;
- Unavailabilities related to security (including the triggering of emergency shutdowns);
- downtimes (fault condition) due to failures not caused by equipment:

- secondary failures caused by environmental factors (e.g.: damage caused by high winds, abnormal weather conditions, pollution, etc.),
- secondary failures of an operational nature caused by an outside party (e.g.: damage resulting from wrongful use; malevolence, vandalism, technical cleaning e.g.: a bottle breaking on a luggage belt);
- downtimes (fault condition) caused by secondary technical failures (unrelated causes) to equipment such as stoppages related to the primary failure of another facility (e.g. failure on an electrical board).

The following are excluded from downtimes:

- Unavailabilities related to security inasmuch as said unavailabilities are the result of exceptional and temporary provisions implemented to ensure the proper operation of facilities, and that said provisions are not the result of any failure on the part of Aéroports de Paris;
- Unavailabilities related to specific welcome procedures for VIPs and requisitions;
- Unavailabilities related to legal procedures and insurance;
- Downtimes for modification, improvement and reconstruction works or for compliance with a new regulation, which would require the neutralisation of the equipment's access perimeter and which have been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have been notified within this same period. In this case, equipment is fully available throughout the phase of planned works until the initially scheduled date for work completion.

For each type of equipment, downtimes are calculated by the period between the notified time of equipment downtime and the time of return to normal operation.

## 3. Indicator definition

$$DEE1 - \left(\sum_{Periode\_Annual} \left[ \sum_{Liste\_des\_Equipement\_e} Ta(e) \right]$$

TA(e) = downtime for equipment "e".

This downtime is measured with accuracy down to one minute.

The useful value of DEE for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

#### 4. Unit and frequency of measurements

Downtimes are measured to one-hundredth of an hour for corrective maintenance and for preventive maintenance.

The availability index for electromechanical equipment is established as a percentage, to onehundredth of a percent.

The measurement is performed monthly.

## 5. Data archiving

## INDICATOR OF AVAILABILITY OF BAGGAGE DELIVERY CAROUSELS (DTB) (Indicator A-2)

## 1. Field covered by the indicator:

- The baggage belts/carousels concerned are those provided for incoming passengers;
- The airports concerned are Paris (CDG) and Paris-Orly.

The overall list of selected belts, those taken into account and not taken into account (in particular where work is scheduled and respecting a 30-day prior notice period) is established for each month and archived as specified under the Data Archiving section. New equipment is taken into account after a regular duty verification period of three months after commissioning.

## 2. Methods of measurement for calculating the indicator

The indicator is the ratio between real operating time and theoretical operating time.

#### Theoretical operating time:

For each terminal, the theoretical operating time of baggage delivery carousels is calculated based on a time span of 24 hours for Paris (CDG) and 18 hours (6am to midnight) for Paris-Orly.

#### Real operating time:

The real operating time of a baggage delivery carousel is equal to the theoretical operating time, minus the following downtimes:

- Downtimes (fault condition) linked to any primary failure (intrinsic cause) of the facility;
- Downtimes planned for preventive maintenance such as "systematic preventive maintenance" and "conditional preventive maintenance";
- Downtimes caused by facility cleaning operations;
- Downtimes for modification, improvement and reconstruction works or for compliance with a regulation, which may require the neutralisation of the equipment's access perimeter and which have not been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have not been notified within this same period;
- Unavailabilities related to security (including the triggering of emergency shutdowns);
- downtimes (fault condition) due to failures not caused by equipment:
  - secondary failures caused by environmental factors (e.g.: damage caused by high winds, abnormal weather conditions, pollution, etc.),
  - secondary failures of an operational nature caused by an outside party (e.g.: damage resulting from wrongful use; malevolence, vandalism, technical cleaning e.g.: a bottle breaking on a luggage belt);
- downtimes (fault condition) caused by secondary technical failures (unrelated causes) to equipment such as stoppages related to the primary failure of another facility (e.g. failure on an electrical board).

The following are excluded from downtimes:

- Unavailabilities related to security inasmuch as said unavailabilities are the result of exceptional and temporary provisions implemented to ensure the proper operation of

facilities, and that said provisions are not the result of any failure on the part of Aéroports de Paris;

- Unavailabilities related to specific welcome procedures for VIPs and requisitions;
- Unavailabilities related to legal procedures and insurance;
- Downtimes for modification, improvement and reconstruction works or for compliance with a new regulation, which may require the neutralisation of the equipment's access perimeter and which have been expressly scheduled at least 30 days ahead of time and on the condition that the airport clients concerned have been notified within this same period. In this case, equipment is fully available throughout the phase of planned works until the initially scheduled date for work completion.

For each type of equipment, downtimes are calculated by the period between the notified time of equipment downtime and the time of return to normal operation.

## 3. Indicator definition

$$DTB1 - \left(\sum_{Annual\_Period} \left[\sum_{List\_of\_belts\_e} TA(E)\right]\right)$$

TA(e) = downtime for equipment "e".

This downtime is measured with accuracy down to one minute.

The useful value of DTB for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

Downtimes are measured to one-hundredth of an hour for corrective maintenance and for preventive maintenance.

The availability index for baggage belts is established as a percentage, to one-hundredth of a percent.

The measurement is performed monthly.

## 5. Data archiving

## INDICATOR FOR AVAILABILITY OF AIRCRAFT STANDS (DPS) (Indicator A-3)

#### 1. Field covered by the indicator:

The scope covers: aircraft parking stands, both contact and outlying stands, usable for commercial handling and excluding private areas.

The airports concerned are Paris (CDG) and Paris-Orly.

The overall list of selected areas, those taken into account and those not taken into account (in particular where work is scheduled and respecting a 30-day prior notice period) is established for each month and archived as specified under the Data Archiving section.

## 2. Methods of measurement for calculating the indicator

The indicator is the ratio between real opening time and theoretical opening time.

#### Theoretical opening time:

For each terminal or area category, the theoretical opening time for a parking stand is calculated based on a time span of 24 hours for Paris (CDG) and 18 hours (6am to midnight) for Paris-Orly.

#### Real opening time:

The real opening time of a parking stand is equal to the theoretical opening time, minus the following downtimes:

- Downtimes related to integral failure of the stand surface area;
- Downtimes related to lighting failure or inadequacies;
- Downtimes related to the absence or illegibility of ground marking;
- Downtimes related to the inoperative state of the fuel system and fuel supply network;
- Downtimes related to the failure of equipment needed to ensure security across parking areas;
- Downtimes for refurbishing or improvement works, which may require the neutralisation of the parking area's access perimeter and which have not been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have not been notified within this same period;
- Downtimes related to external factors, in particular the presence of contaminants (fuel, winter clearance products, snow, ice, etc.) for a cause attributable to Aéroports de Paris or its sub-contractor.

The following are excluded from closure times:

- Downtimes related to wrongful operating by a third party, malevolence, vandalism;
- Unavailabilities due to an accident not attributable to Aéroports de Paris or its subcontractors;
- Unavailabilities related to security in that said unavailabilities are the result of exceptional and temporary provisions implemented to ensure the proper operation of facilities, and that said provisions are not the result of any failure on the part of Aéroports de Paris;
- Unavailabilities related to specific welcome procedures for VIPs and requisitions;
- Unavailabilities related to legal procedures and insurance;
- Unavailabilities required by refurbishing or improvement works that require the neutralisation of the parking area's access perimeter and the parking stand itself, providing that said works have been expressly scheduled at least 30 days ahead of time and that the users concerned have been notified within this same period; In this case, equipment is fully available throughout the phase of planned works until the initially scheduled date for work completion.

For each parking stand, closure times are calculated by the period between the notified parking stand closure time and the stand's time of return to normal operations.

## 3. Indicator definition

$$DPS = 1 - \left(\sum_{Annual\_Period} \left[\sum_{List\_of\_Stands\_e} TA(e)\right]\right)$$

TA(e) = time of unavailability for parking stand "e".

The useful value of DPS for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

Downtimes are monitored in minutes.

The availability index for aircraft parking stands is established as a percentage, to one-hundredth of a percent.

The measurement is performed monthly.

## 5. Data archiving

#### INDICATOR FOR THE AVAILABILITY OF PASSENGER BOARDING BRIDGES (DPT) (Indicator A-4)

## 1. Field covered by the indicator:

The equipment concerned is passenger boarding bridges in terminals intended for passengers at the airports of Paris-CDG and Paris-Orly.

The overall list of selected equipment, that taken into account and that not taken into account (in particular where work is scheduled and respecting a 30-day prior notice period) is established for each month and archived as specified under the Data Archiving section. New equipment is taken into account after a regular duty verification period of three months after commissioning.

## 2. Methods of measurement for calculating the indicator

The indicator is the ratio between real operating time and theoretical operating time.

#### Theoretical operating time:

For each terminal, the theoretical operating time of boarding bridges is calculated based on a time span of 24 hours for Paris (CDG) and 18 hours (6am to midnight) for Paris-Orly.

#### Real operating time:

The real operating time of equipment is equal to the theoretical operating time, minus the following downtimes:

- Downtimes (fault condition) linked to any primary failure (intrinsic cause) of the facility;
- Downtimes scheduled for preventive maintenance such as "systematic preventive maintenance" and "conditional preventive maintenance";
- Downtimes caused by facility cleaning operations;
- Downtimes for modification, improvement and reconstruction works or for compliance with a regulation, which may require the neutralisation of the equipment's access perimeter and which have not been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have not been notified within this same period;
- Unavailabilities related to security (including the triggering of emergency shutdowns);
- downtimes (fault condition) due to failures not caused by equipment:
  - secondary failures caused by environmental factors (e.g.: damage caused by high winds, abnormal weather conditions, pollution, etc.),
  - secondary failures of an operational nature caused by an outside party (e.g.: damage resulting from wrongful use; malevolence, vandalism, technical cleaning e.g.: a bottle breaking on a luggage belt);
- downtimes (fault condition) caused by secondary technical failures (unrelated causes) to equipment such as stoppages related to the primary failure of another facility (e.g. failure on an electrical board).

The following are excluded from downtimes:

- Unavailabilities related to security in that said unavailabilities are the result of exceptional and temporary provisions implemented to ensure the proper operation of facilities, and that said provisions are not the result of any failure on the part of Aéroports de Paris;
- Unavailabilities related to specific welcome procedures for VIPs and requisitions;
- Unavailabilities related to legal procedures and insurance;
- Downtimes for modification, improvement and reconstruction works or for compliance with a new regulation, which may require the neutralisation of the equipment's access perimeter and which have been expressly scheduled at least 30 days ahead of time and in that the airport clients concerned have been notified within this same period. In this case, equipment is fully available throughout the phase of planned works until the initially scheduled date for works to end.

For each boarding bridge, downtimes are calculated by the period between the notified time of equipment downtime and the time of return to normal operation.

## 3. Indicator definition

 $DPT = 1 - \left(\sum_{Annual\_Period} \left[\sum_{List\_of\_equipment\_e} TA(e)\right]\right)$ 

TA(e) = downtime for equipment "e".

This downtime is measured in hours and hundredths of an hour for corrective maintenance, and in hours and tenths of an hour for preventive maintenance.

The useful value of DPT for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

Downtimes are measured to one-hundredth of an hour for corrective maintenance and for preventive maintenance.

The availability index for passenger boarding bridges is established as a percentage, to onehundredth of a percent.

The measurement is performed monthly.

## 5. Data archiving

## INDICATOR FOR THE AVAILABILITY OF 400 HZ ELECTRICAL SUPPLY (D4H) (Indicator A-5)

## 1. Field covered by the indicator:

All 400 Hz electrical supply equipment provided for the airports of Paris-Charles de Gaulle and Paris-Orly.

The overall list of selected equipment, that taken into account and that not taken into account (in particular where work is scheduled and respecting a 30-day prior notice period) is established for each month and archived as specified under the Data Archiving section. New equipment is taken into account after a regular duty verification period of three months after commissioning.

## 2. Methods of measurement for calculating the indicator

The indicator is the ratio between real operating time and theoretical operating time.

#### Theoretical operating time:

For each terminal, the theoretical operating time of 400 Hz electrical supply equipment is calculated based on a time span of 24 hours for Paris (CDG) and 18 hours (6am to midnight) for Paris-Orly.

## Real operating time:

The real operating time of 400 Hz electrical supply equipment is equal to the theoretical operating time, minus the following downtimes:

- Downtimes (fault condition) linked to any primary failure (intrinsic cause) of the facility;
- Downtimes scheduled for preventive maintenance such as "systematic preventive maintenance" and "conditional preventive maintenance";
- Downtimes caused by facility cleaning operations;
- Downtimes for modification, improvement and reconstruction works or for compliance with a regulation, which may require the neutralisation of the equipment's access perimeter and which have not been expressly scheduled at least 30 days ahead of time or for which the airport clients concerned have not been notified within this same period;
- Unavailabilities related to security (including the triggering of emergency shutdowns);
- downtimes (fault condition) due to failures not caused by equipment:
  - secondary failures caused by environmental factors (e.g.: damage caused by high winds, abnormal weather conditions, pollution, etc.),
  - secondary failures of an operational nature caused by an outside party (e.g.: damage resulting from wrongful use; malevolence, vandalism, technical cleaning e.g.: a bottle breaking on a luggage belt);
- downtimes (fault condition) caused by secondary technical failures (unrelated causes) to equipment such as stoppages related to the primary failure of another facility (e.g. failure on an electrical board).

The following are excluded from downtimes:

- Unavailabilities related to security in that said unavailabilities are the result of exceptional and temporary provisions implemented to ensure the proper operation of facilities, and that said provisions are not the result of any failure on the part of Aéroports de Paris;
- Unavailabilities related to specific welcome procedures for VIPs and requisitions;
- Unavailabilities related to legal procedures and insurance;
- Downtimes for modification, improvement and reconstruction works or for compliance with a new regulation, which may require the neutralisation of the equipment's access perimeter and which have been expressly scheduled at least 30 days ahead of time and in that the airport clients concerned have been notified within this same period. In this case, equipment is fully available throughout the phase of planned works until the initially scheduled date for works to end.

For each type of equipment, downtimes are calculated by the period between the notified time of equipment downtime and the time of return to normal operation.

#### 3. Indicator definition

$$D4H = 1 - \left(\sum_{Annual\_Period} \left[\sum_{List\_of\_400Hzequipment\_e} TA(e)\right]\right)$$

TA(e) = downtime for 400 Hz equipment "e".

This downtime is measured with accuracy down to one minute.

The useful value of D4H for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

#### 4. Unit and frequency of measurements

Downtimes are measured to one-hundredth of an hour for corrective maintenance and for preventive maintenance.

The availability index for 400 Hz electrical equipment is established as a percentage, to one-hundredth of a percent.

The measurement is performed monthly.

## 5. Data archiving

#### INDICATOR FOR PASSENGER SATISFACTION WITH TERMINAL CLEANLINESS (SPR) (Indicator A-6)

#### 1. Field covered by the indicator:

- Terminal areas intended for passengers and the general public;

- The airports concerned are Paris (CDG) and Paris-Orly.

#### 2. Methods of measurement for calculating the indicator

Measurements are performed via quarterly surveys using methodology proposed by ACI, based on a questionnaire intended for outgoing passengers and available in nine languages.

Passengers are questioned in boarding lounges. Questionnaires are completed directly by passengers.

The sample involves a minimum of 5,000 passengers per quarterly period, spread over the terminals of both airports.

For each flight, the number of collected questionnaires is fewer than 10 questionnaires.

The question asked is the following:

"Based on your experience, please rate this airport for each of the following aspects... Cleanliness of this airport terminal?"

Possible replies are as follows: "Poor (1) – Fair (2) – Good (3) – Very good (4) – Excellent (5) - (No opinion)"

The surveys are carried out by an opinion poll institute commissioned by Aéroports de Paris.

#### 3. Indicator definition

The value of the indicator is supplied by ACI. The formulas used to calculate this value are specified below:

For a given scope (terminal, UO, airport) and period (quarter, year ERA3, etc.):

$$SPR = \frac{\sum_{i=1}^{n} x_i}{n}$$

where:

i = 1,..., n passengers questioned having answered the question asked about the cleanliness of terminals (the "no opinion" replies are excluded from the calculation) for a given scope and period

xi is the satisfaction score from passengers who answered the question about the cleanliness of terminals (values ranging from 1 to 5)

The above formula applies to any aggregation of time (quarter, year ERA3, etc.) or space (terminal, UO, airport, etc.), i.e. the indicator is recalculated based on individual data. No average of averages is applied.

The useful value of SPR for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

The SPR indicator is measured as an average score from 5, to the nearest one-hundredth.

This is a continuous measurement carried out with a quarterly aggregation per terminal.

## 5. Data archiving

#### INDICATOR FOR PASSENGER SATISFACTION WITH EASE OF ORIENTATION IN THE AIRPORT (SOR) (Indicator A-7)

#### 1. Field covered by the indicator:

- Terminal areas intended for passengers and the general public;

- The airports concerned are Paris (CDG) and Paris-Orly.

#### 2. Methods of measurement for calculating the indicator

Measurements are performed via quarterly surveys using methodology proposed by ACI, based on a questionnaire intended for outgoing passengers and available in nine languages.

Passengers are questioned in boarding lounges. Questionnaires are completed directly by passengers.

The sample involves a minimum of 5,000 passengers per quarterly period, spread over the terminals of both airports.

For each flight, the number of collected questionnaires is fewer than 10 questionnaires.

The question asked is the following:

"Based on your experience, please rate this airport for each of the following aspects... Ease of finding your way around the airport?"

Possible replies are as follows:

"Poor (1) - Fair (2) - Good (3) - Very good (4) - Excellent (5) - (No opinion)"

The surveys are carried out by an opinion poll institute commissioned by Aéroports de Paris.

#### 3. Indicator definition

The value of the indicator is supplied by ACI. The formulas used to calculate this value are specified below:

For a given scope (terminal, UO, airport) and period (quarter, year ERA3, etc.):

$$SOR = \frac{\sum_{i=1}^{n} x_i}{n}$$

where:

i = 1,..., n passengers questioned having answered the question about the cleanliness of terminals (the "no opinion" replies are excluded from the calculation) for a given scope and period

xi is the satisfaction score from passengers who answered the question about the cleanliness of terminals (values ranging from 1 to 5)

The above formula applies to any aggregation of time (quarter, year ERA3, etc.) or space (terminal, UO, airport, etc.), i.e. the indicator is recalculated based on individual data. No average of averages is applied.

The useful value of SOR for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

Indicator SOR is measured as an average score out of 5, to the nearest one-hundredth.

This is a continuous measurement carried out with a quarterly aggregation per terminal.

## 5. Data archiving

#### INDICATOR OF PASSENGER SATISFACTION WITH THE EASE OF CONNECTION WITH OTHER FLIGHTS (SFC) (Indicator A-8)

#### 1. Field covered by the indicator:

- Terminal areas intended for passengers and the general public;

- The airports concerned are Paris (CDG) and Paris-Orly.

#### 2. Methods of measurement for calculating the indicator

Measurements are performed via quarterly surveys using methodology proposed by ACI, based on a questionnaire intended for outgoing passengers and available in nine languages.

Passengers are questioned in boarding lounges. Questionnaires are completed directly by passengers.

The sample involves a minimum of 5,000 passengers per quarterly period, spread over the terminals of both airports.

For each flight, the number of collected questionnaires is fewer than 10 questionnaires.

The question asked is the following:

"Based on your experience, please rate this airport for each of the following aspects... Ease of connection with other flights?"

Possible replies are as follows: "Poor (1) – Fair (2) – Good (3) – Very good (4) – Excellent (5) - (No opinion)"

The surveys are carried out by an opinion poll institute commissioned by Aéroports de Paris.

#### 3. Indicator definition

The value of the indicator is supplied by ACI. The formulas used to calculate this value are specified below:

For a given scope (terminal, UO, airport) and period (quarter, year ERA3, etc.):

$$SFC = \frac{\sum_{i=1}^{n} x_i}{n}$$

where:

i = 1,..., n passengers questioned having answered the question about the cleanliness of terminals (the "no opinion" replies are excluded from the calculation) for a given scope and period

xi is the satisfaction score from passengers who answered the question about the cleanliness of terminals (values ranging from 1 to 5)

The above formula applies to any aggregation of time (quarter, year ERA3, etc.) or space (terminal, UO, airport, etc.), i.e. the indicator is recalculated based on individual data. No average of averages is applied.

The useful value of SFC for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

The SFC indicator is measured as an average score out of 5, to the nearest one-hundredth.

This is a continuous measurement carried out with a quarterly aggregation per terminal.

## 5. Data archiving

#### INDICATOR FOR OVERALL SATISFACTION WITH THE AIRPORT (DEPARTURES) (SGD) (Indicator A-9)

#### 1. Field covered by the indicator:

- Terminal areas intended for passengers and the general public;

- The airports concerned are Paris (CDG) and Paris-Orly.

#### 2. Methods of measurement for calculating the indicator

Measurements are performed via quarterly surveys using methodology proposed by ACI, based on a questionnaire intended for outgoing passengers and available in nine languages.

Passengers are questioned in boarding lounges. Questionnaires are completed directly by passengers.

The sample involves a minimum of 5,000 passengers per quarterly period, spread over the terminals of both airports.

For each flight, the number of collected questionnaires is fewer than 10 questionnaires.

The question asked is the following:

"Based on your experience, please rate this airport for each of the following aspects... Overall satisfaction with this airport?"

Possible replies are as follows: "Poor (1) – Fair (2) – Good (3) – Very good (4) – Excellent (5) - (No opinion)"

The surveys are carried out by an opinion poll institute commissioned by Aéroports de Paris.

#### 3. Indicator definition

The value of the indicator is supplied by ACI. The formulas used to calculate this value are specified below:

For a given scope (terminal, UO, airport) and period (quarter, year ERA3, etc.):

$$SGD = \frac{\sum_{i=1}^{n} x_i}{n}$$

where:

i = 1,..., n passengers questioned having answered the question about the cleanliness of terminals (the "no opinion" replies are excluded from the calculation) for a given scope and period

xi is the satisfaction score from passengers who answered the question about the cleanliness of terminals (values ranging from 1 to 5)

The above formula applies to any aggregation of time (quarter, year ERA3, etc.) or space (terminal, UO, airport, etc.), i.e. the indicator is recalculated based on individual data. No average of averages is applied.

The useful value of SGD for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

## 4. Unit and frequency of measurements

The SGD indicator is measured as an average score out of 5, to the nearest one-hundredth.

This is a continuous measurement carried out with a quarterly aggregation per terminal.

## 5. Data archiving

#### INDICATOR FOR OVERALL SATISFACTION WITH THE AIRPORT (ARRIVALS) (SGA) (Indicator A-10)

#### 1. Field covered by the indicator:

- Terminal areas intended for passengers and the general public;

- The airports concerned are Paris (CDG) and Paris-Orly.

#### 2. Methods of measurement for calculating the indicator

Measurements are conducted via quarterly surveys based on a questionnaire intended for passengers and drawn up in 3 different languages.

At Arrivals, passengers are questioned one-on-one at the exit areas of each terminal: at waiting areas for public transport, at access areas to car-parks nearby, at taxi ranks and quick drop-off areas. Excluded from the survey are same-day transit passengers within the airport and passengers using a rented car or a private vehicle parked in a remote car-park.

The sample involves a minimum of 5,000 passengers per quarterly period, spread over both airports; it is representative of passenger traffic at arrivals based on their point of origin and the forms of transport they use to leave the airport.

Overall satisfaction is calculated via the average satisfaction score for the 42 themes listed in Appendix 1, weighted by the level of use of corresponding services.

Possible replies are as follows:

"Very satisfied - Satisfied - Not really satisfied - Not at all satisfied - (no opinion)"

The surveys are carried out by an opinion poll institute commissioned by Aéroports de Paris.

For each theme, the level of satisfaction is calculated as the portion of satisfied or very satisfied passengers in relation to all the passengers who answered the question (excluding the 'no opinions').

The level of use of corresponding services is the portion of passengers who, during the same survey, said they used these services in relation to all the passengers who were questioned.

List of the 42 themes comprising satisfaction at arrival

- Runway bus
  - Travel time from plane to terminal
  - o Comfort
- ➢ Bridge
  - o Cleanliness
- Security checkpoint
  - o Waiting time
  - Organisation of queues
  - Friendliness
- ➢ Baggage delivery

- o Signage to baggage delivery
- Signage around the carousel
- o Information provided
- o Waiting time
- o Cleanliness
- o Comfort
- Waiting time for baggage delivery
  - 0 Reliability
  - o Clarity
- Baggage trolleys
  - 0 Signage
  - 0 Availability
  - o Easy handling
- Sanitary facilities
  - o Signage
  - 0 Availability
  - 0 Cleanliness
  - o Equipment
- > ADP information desks
  - o Signage
  - o Reception
  - o Advice
  - o Answer received
- > The airport's full passenger trajectory
  - o Ease of orientation
  - o Staff in attendance
  - o Cleanliness
  - o Atmosphere
- $\triangleright$  Car parks
  - o Signage
  - o Security
  - o Cleanliness
  - o Atmosphere
- ➢ Taxi rank
  - o Signage
- Public transport
  - Ease of finding information
  - o Signage
  - o Station comfort
  - o Waiting room comfort
  - o Information inside the terminal
  - o Public transport service
  - o Shuttle and bus service

#### ➢ Attendants

o Ease of meeting up

#### 3. Indicator definition

For a given scope (terminal, UO, airport, Aéroports de Paris as a whole) and given period (quarter, year ERA3, etc.):

$$SGA \frac{\sum_{n=1}^{n} Pond_{ij}(n) * satisfaction_{ij}(n) * E_{i,j}}{\sum_{n=1}^{N} Pond_{ij}(n) * E_{i,j}} = \frac{\sum_{n=1}^{n=1N} NS_{ij}(n)}{\sum_{n=1}^{N} NU_{ij}(n)} = \frac{NS_{ij}}{NU_{ij}}$$

where:

- Pondij(n) is the level of use of services relating to the theme "n" for quarterly period "i" and terminal "j"

- Satisfactionij (n) is the level of satisfaction with theme "n" for quarterly period "i" and terminal "j"

- Eij(n) is the number of persons polled at arrivals for the quarterly period "i" and terminal "j"

- NSij(n) is the number of "satisfied" or "very satisfied" users for theme "n", extrapolated to arrival traffic for the quarterly period "i" and terminal "j"

- NUij(n) is the number of users for theme "n", extrapolated to arrival traffic for the quarterly period "i" and terminal "j"

The above formula applies to any aggregation of time (quarter, year ERA3, etc.) or space (terminal, UO, airport, etc.), i.e. the indicator is recalculated based on individual data. No average of averages is applied.

The useful value of SGA for the pricing period "n" is measured over a period ranging from 1 July of year "n-2" to 30 June of year "n-1".

#### 4. Unit and frequency of measurements

The SGA indicator is measured as an average score out of 5, to the nearest one-hundredth.

This is a continuous measurement carried out with a quarterly aggregation per terminal.

#### 5. Data archiving

#### **APPENDIX 3**

#### Fee scale at the date of signature of the agreement

- 1. Landing fee relating to the use of airport infrastructures and equipment needed for landing, take-off and taxiing. Prices are based on the aircraft's certified maximum take-off weight (MTOW).
- Fee paid for the landing of aircraft at the airports of Paris-Orly and Paris-Charles de Gaulle

MTOW brackets in tonnes	Prices in € ex VAT (excluding acoustics adjustment)
aircraft with MTOW of less than 6 tonnes	188.58
aircraft with MTOW between 6 and 40 tonnes	188.58
aircraft with MTOW of 41 tonnes and	188.58 + 6.437 (t-40)
more	where t is the MTOW in tonnes

special provisions:

the rate is multiplied by a factor, specified below, depending on the aircraft's acoustics group and time of landing; acoustics groups are those groups defined by the appendix to the amended Order of 24 January 1956, establishing the conditions for setting and receiving landing fees and for the use of lighting systems, payable at aerodromes open to public air traffic.

Paris-Orly and Paris-Charles de Gaulle			
Acoustics group	Daytime and evening (6am to 10pm)	Nighttime (10pm to 6am)	
Group 1	1.300	1.950	
Group 2	1.200	1.800	
Group 3	1.150	1.725	
Group 4	1.000	1.500	
Group 5a	0.850	1.275	
Group 5b	0.700	1.050	

- Fee paid for the landing of an aircraft at the airport of Paris - Le Bourget.

MTOW brackets in tonnes	Prices in € ex VAT (excluding acoustics adjustment)	
aircraft with MTOW of less than 6	165.25	
tonnes	103.25	
aircraft with MTOW between 6 and 50	165.25 + 3.24 (t-6)	
tonnes	where t is the MTOW in tonnes	
aircraft with MTOW of 51 tonnes and	307.81 + 15.57 (t-50)	
more	where t is the MTOW in tonnes	

special provisions:

- for helicopter flights, a reduction of 50% is applied to these rates;
- for positioning flights between an Aéroports de Paris airport and Paris Le Bourget airport, a reduction of 50% is applied to these rates;
- for training flights authorised by the Board of Civil Aviation (DGAC), a reduction of 75% is applied to these rates;
- for test flights or emergency return flights, the fee does not apply;
- the rate is multiplied by a factor, specified below, depending on the aircraft's acoustics group and time of landing; acoustics groups are those groups defined by the appendix to the amended

Order of 24 January, 1956, establishing the conditions for setting and receiving landing fees and for the use of lighting systems, payable at aerodromes open to public air traffic.

Paris-Le Bourget		
Acoustics group	Daytime and evening (6am to 10pm)	Nighttime (10pm to 6am)
Group 1	1.300	4.000
Group 2	1.200	1.800
Group 3	1.150	1.725
Group 4	1.000	1.500
Group 5a	0.850	1.275
Group 5b	0.700	1.050

2. Parking fee relating to the use of parking infrastructures and equipment by aircraft. Fee rates are based on the duration of parking, aircraft characteristics (certified maximum take-off weight - MTOW) and the characteristics of the parking apron.

Paris-Orly and Paris-Charles de Gaulle airports

	Types of parking areas			
	Traffic areas			
	In contact with terminals Out		Garage areas	
Fixed portion - in € ex VAT	€2,819 per ton of MTOW for areas fitted with a bridge only	not applicable	not applicable	
Fixed portion - in € ex VAT	Due for all contact areas €0.061 per tonne of MTOW and per bracket of 10 minutes	€0.061 per tonne of MTOW and per bracket of 10 minutes	€0.128 per tonne of MTOW and per bracket of 0.128 minutes	

special provisions:

- a buffer period of 50 minutes is applied to the variable portion for aircraft which, upon arrival, use an outlying traffic area by day (between 7am and 11pm, local time);
- the variable portion for traffic areas is downgraded at night (11pm to 7am) to garage area;
- for the variable portion, any bracket period begun is due in full (bracket of 10 minutes for contact and outlying traffic areas, bracket of one hour for garage areas);
- in the event of combined ground-handling (arrival in contact area, departure in outlying area or vice versa), a reduction of 50% is applied to the calculation of the fixed portion of the fee.

Paris-Le Bourget airport

	Outlying traffic areas		
Variable portion - in € ex VAT	€0.349 per tonne of MTOW and per hour		

3. Fee per passenger for Paris-Orly and Paris-Charles de Gaulle airports, relating to the use of facilities developed for the reception of passengers and the general public. This fee is calculated on the number of passengers taken on board.

- Fee per passenger excluding transit passengers

Rates per passenger flying to:	Rates in € exclusive of VAT
mainland France	9.82
the Schengen area	9.82
the EU, the EEA outside of Schengen and French overseas territories	10.82
International destinations (outside of EU, European Economic Area, French overseas territories)	23.93

#### - Fee per transit passenger

Rates per passenger flying to:	Rates in € exclusive of VAT
mainland France	5.89
the Schengen area	5.89
the EU, the EEA outside of Schengen and French overseas territories	6.49
International destinations (outside of EU, European Economic Area, French overseas territories)	14.35

# 4. Fee for the provision of check-in and boarding counters and the handling of local baggage at the Paris-Charles de Gaulle and Paris-Orly airports

Fee rates for the use of check-in and boarding counters and the handling of local baggage are made up of a fixed portion, the base of which is the check-in desk or the self-service module used, and of a variable portion, the base of which is the boarding passenger excluding transit passengers. The definition of transit passengers is the same as that applicable to the passenger fee (article 2 of the amended Order of the 26 February 1981).

The fixed portion is due and payable by the airline or the ground-handling service providers who use the check-in desk. The annual rate for the fixed portion constitutes an annual flat fee for each check-in desk rented on a yearly basis. It is applicable on a pro rata temporis basis in cases of rental for an entire aviation season. The hourly rate applies whenever a check-in desk is used on a one-off basis.

Fixed portion	Rates in € exclusive of VAT
Check-in desks	
- annual rate per check-in desk	13,752.00
- hourly rate (per hour of allocation of a check-in desk)	4.97
Self-service check-in modules:	
- annual rate per module	3,380.00
- quarterly rate per module	845.00

- for the Paris-Orly and Paris-Charles de Gaulle airports:

The variable portion is due and payable by the airline. The rate for the variable portion is differentiated according to passenger destinations, split into two categories:

- National traffic, European Union, European Economic Area, Switzerland, French Overseas Territories;

- international traffic other than that mentioned above.

- for Paris-Orly airport:

	Rates in € exclusive of VAT per	
Variable portion	passenger excluding transit	
	passengers	
- national traffic, European Union, EEA, Switzerland, French	0.518	
overseas territories	1.558	
- other international traffic		

#### - for Paris-Charles de Gaulle airport:

	Rates in € exclusive of VAT per
Variable portion	passenger excluding transit
	passengers
- national traffic, European Union, EEA, Switzerland, French	1.18
overseas territories	3.547
- other international traffic	

## 5. Fee for the provision of baggage sorting facilities for connecting flights at Terminal 1 of Paris-Charles de Gaulle airport

The fee for the provision of baggage sorting facilities for connecting flights at Terminal 1 of Paris-Charles de Gaulle airport is set at €2.85 ex VAT per connecting flight baggage.

## 6. Fee for the provision of baggage sorting facilities for connecting flights at Terminal 2 of Paris-Charles de Gaulle airport

The fee is set at €9.05 ex VAT per connecting flight baggage at the CDG2 terminal.

# 7. The computing fee for check-in and boarding (CREWS system) for Paris-Charles de Gaulle and Paris-Orly airports

The CREWS system is a facility for carrying out passenger check-in and boarding operations by granting airlines access to the operational computing system.

This fee, due and payable by the airline, is based on the number of passengers flying from appropriately equipped terminals or parts of terminals, with differentiation made between non-transit and transit passengers, as per the following terms:

- €0.398 per passenger excluding transit passengers;
- €0.120 per transit passenger.

# 8. Fee for the provision of fixed electricity supply facilities for aircraft at Paris-Orly and Paris-Charles de Gaulle airports.

The fee relates to the provision of fixed electricity supply facilities for aircraft. The fee is calculated based on ground-handling activity between arrival and departure. Rates are determined based on electricity supply to the parking stand (400 Hz or 50 Hz), on the aircraft's origin or destination, and on the category of energy needs, in particular the carrier's technical equipment (the number of sockets).

	Aircraft stand 400 Hz Ground-handling from arrival to departure, flight from or to an airport		Aircraft s Ground-handlin depa flight fi an a	tand 50 Hz ng from arrival to arture, com or to irport
Categories and aircraft equipment	From the European Union, the EEA and Switzerland	Outside the European Union, the EEA and Switzerland	From the European Union, the EEA and Switzerland	Outside the European Union, the EEA and Switzerland
Category 1 (1 socket)	€14.68	€22.02	€7.34	€11.01
Category 2 (2 sockets)	€29.36	€44.04	€14.68	€22.02
Category 3 (3 sockets and more)	€63.48	€95.22	€31.74	€47.61

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## 9. Fee for the provision of facilities for the de-icing of aircraft at Paris-Charles de Gaulle airport

Fee rates for the provision of facilities for the de-icing of aircraft at Paris-Charles de Gaulle airport, due and payable by the airline, comprise two portions:

- 1. a fixed portion, the amount of which is due for each landing between 15 October 2015 and 15 May 2016. This rate includes a factor ranging from 1 to 5 according to the class of DU (de-icing unit) appropriate to the aircraft up for de-icing services;
- a variable portion, due for each de-icing operation carried out between 1 October 2015 and 31 May 2016.

Rates are applicable from 15 October for the fixed portion and from 1 October 2015 for the variable portion. Up until these dates, the earlier applicable rates for the variable portion and the fixed portion will remain in effect.

	Fixed portion in € ex VAT	Variable portion in € ex VAT		
class 1 aircraft	34.88	1,141.00		
class 2 aircraft	69.76	2,282.00		
class 3 aircraft	104.64	3,426.00		
class 4 aircraft	139.52	4,564.00		
class 5 aircraft	174.40	5,705.00		

DU c	lass 1	DU c	lass 2	DU c	lass 3	DU c	lass 4	DU c	lass 5
Aircraft	Wing								
type	surface								
SWM	25.8	731	91.0	T5B	201.5	ILW	320.0	380	845.0
H25	34.8	733	91.0	TU5	201.5	L10	321.0		
EM2	39.4	734	91.0	310	219.0	L12	321.0		
SF3	41.8	735	91.0	312	219.0	787	325.0		
SH3	42.1	737	91.0	A31	219.0	D11	328.8		
SH6	42.1	73A	91.0	114	260.0	L15	329.0		
DFL	46.8	732	91.0	AB2	260.0	D14	338.9		
EM4	51.0	D92	93.0	AB3	260.0	M11	339.3		
DH8	54.4	D93	93.0	AB4	260.0	SSC	358.3		
AT4	54.5	D94	93.0	AB6	260.0	330	361.6		
ATR	54.5	D95	93.0	VCS	260.0	340	361.6		
CRJ	54.5	D98	93.0	D85	267.9	D10	367.7		
CR1	54.5	B14	93.2	DC8	267.9	777	427.8		
AT5	54.5	100	93.5	D70	271.9	747	512		
AT4	54.5	F70	93.5	D87	271.9	744	524.9		
S00	55.7	B11	95.8	D8L	271.9	74F	541.2		
DHT	56.2	B15	95.8	D8M	271.9	741	541.2		
AT7	60.0	DAM	116.0	D8A	271.9	742	541.2		
F27	70.0	M80	118.0	IL6	279.6	743	541.2		
FKF	70.0	319	122.4	762	283.3	74B	541.2		
F50	70.0	320	123.0	763	283.3	74C	541.2		
F28	76.4	321	123.0	767	283.3	74D	541.2		
FJF	76.4	T3B	127.3	707	283.4	74L	541.2		
14F	77.3	TU3	127.3						
146	77.3	TRD	138.7						
142	77.3	CRS	146.7						
AR8	77.3	CRV	146.7						
DH7	79.9	72F	153.0						
CVR	85.5	73S	154.0						
D91	86.8	721	157.9						
DC3	90.0	727	157.9						
NDC	90.0	728	157.9						
		752	185.3						
		757	185.3						

## REFERENCE TABLE FOR AIRCRAFT TYPES

#### 10. Fee for assistance to disabled and mobility-impaired people

The fee is based on the total number of passengers boarded at Paris-Charles de Gaulle and Paris-Orly airports, with the sole exceptions mentioned under article 6 of the Order of 26 February 1981 regulating the conditions for the setting and receiving of fees for the use of facilities developed for the reception of passengers and goods at the airports of mainland France and French Overseas Territories.

The fee rates for assistance to disabled and mobility-impaired people are established as follows:

- €0.749 ex VAT per passenger boarding at Paris-Orly airport;
- €1.286 ex VAT per passenger boarding at Paris-Charles de Gaulle.

# 11. The fee for entry passes to restricted areas at Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget airports

The fee is due and payable by companies or organisations employing the persons referred to under article L. 6342-2 of the French Transport Code. It is paid with the filing of each application for entry passes to restricted areas referred to under article R.213-3-3 of the French Civil Aviation Code to the relevant department of Aéroports de Paris. Should the Government refuse to accredit the person concerned, under item I of article R.213-3-1 of the French Civil Aviation Code, the fee shall be refunded directly or in the form of a credit.

The fee rate for passes to restricted areas at Paris-Charles de Gaulle, Paris-Orly and Paris-Le Bourget airports is set at €58 ex. VAT.

#### 12. Fee for the treatment of wastewater from aircraft (sieving)

The fee for wastewater sieving services payable by the carrier or ground-handling service provider is as follows:

- •
- for Paris-Orly airport:

	Rates (in euros ex VAT)
Wastewater sieving fee	€68.50 per trip by disposal truck
The fee is due and neurable by ground handling comi	a providers

The fee is due and payable by ground-handling service providers.

#### - for Paris-Charles de Gaulle airport:

	Rates (in euros ex VAT)
Wastewater sieving fee	€45.05 per trip by disposal truck

The fee is payable by the air carrier or, where appropriate, by its ground-handling service provider.

#### **APPENDIX 4**

#### Methods of calculation for the TRAF factor

The "TRAF" factor, mentioned under item III.2.3.3 is defined as follows:

- TRAF(2016) = TRAF(2017) = 0
- For year n>2017:
  - if  $QT(n) \ge QTM(n)$

$$TRAF(n) = Max(-0.5\%; -0.5*\frac{(QT(n) - (QT(n)))}{QTref(n)})$$
if QTm(n) < QT(n) < QTM(n),

$$TRAF(n) = 0$$

• if  $QTm(n) \ge QT(n)$ ,

$$TRAF(n) = Min(0.2\%; -0.2\frac{(QTm(n) - (QT(n)))}{QTref(n)}$$

#### **APPENDIX 5**

## Method of calculation for the QDS factor

The target levels, Maximum Levels (MI), Minimum Levels (mI) and buffers (f) of the indicators mentioned under item II.2.1-A and III.2.3.4 are as follows for each period running from 1 July "n-1" to 30 June "n":

"Quality standard" indicators:

Indicator A-1 (DEE)	2016	2017	2018	2019	2020
$mI_1$	93.50%	93.75%	94.00%	94.25%	94.50%
Target 1	95.00%	95.25%	95.50%	95.75%	96.00%

Indicator A-2 (DTB)	2016	2017	2018	2019	2020
mI <sub>2</sub>	96.50%	96.50%	96.50%	96.50%	96.50%
Target 2	98.00%	98.00%	98.00%	98.00%	98.00%

Indicator A-3 (DPS)	2016	2017	2018	2019	2020
mI <sub>3</sub>	92.50%	92.75%	93.00%	93.25%	93.50%
Target <sub>3</sub>	94.00%	94.25%	94.50%	94.75%	95.00%

Indicator A-4 (DPT)	2016	2017	2018	2019	2020
$mI_4$	93.50%	93.75%	94.00%	94.25%	94.50%
Target <sub>4</sub>	95.00%	95.25%	95.50%	95.75%	96.00%

Indicator A-5 (D4H)	2016	2017	2018	2019	2020
$mI_5$	95.50%	95.50%	95.50%	95.50%	95.50%
Target <sub>5</sub>	97.00%	97.00%	97.00%	97.00%	97.00%

Indicator A-6 (SPR)	2016	2017	2018	2019	2020
$mI_6$	3.85	3.85	3.85	3.85	3.85
Target <sub>6</sub>	3.88	3.90	3.91	3.93	4.05

Indicator A-7 (SOR)	2016	2017	2018	2019	2020
mI <sub>7</sub>	3.68	3.68	3.68	3.68	3.68
Target <sub>7</sub>	3.71	3.73	3.75	3.76	3.87

#### "Excellence" indicators

Indicator A-8 (SFC)	2016	2017	2018	2019	2020
mI <sub>8</sub>	3.48	3.48	3.48	3.48	3.48
Target <sub>8</sub>	3.51	3.52	3.53	3.55	3.57
$MI_8$	3.54	3.56	3.60	3.65	3.74
fi <sub>8</sub>	+/-0.02	+/-0.02	+/-0.03	+/-0.04	+/-0.05

Indicator A-9 (SGD)	2016	2017	2018	2019	2020
$mI_9$	3.63	3.63	3.63	3.63	3.63
Target <sub>9</sub>	3.66	3.67	3.68	3.70	3.73
$MI_9$	3.70	3,72	3.75	3.80	4.00
fig	+/-0.02	+/-0.02	+/-0.03	+/-0.04	+/-0.05

Indicator A-10	2016	2017	2018	2019	2020
(SGA)					
$mI_{10}$	88.00%	88.25%	88.50%	88.75%	89.00%
Target <sub>10</sub>	91.00%	91.25%	91.50%	91.75%	92.00%
$MI_{10}$	94.00%	94.25%	94.50%	94.75%	95.00%
fi <sub>10</sub>	+/-1%	+/-1%	+/-1%	+/-1%	+/-1%

 $I_i(n)$  designates the value of indicator no. "i" relating to the period from 1 July, year "n-1" to 30 June, year "n", with the exception of indicators i = 1 to 5 for which  $I_i(2016)$  designates the value of indicator no. "i" relating to the period from 1 January to 30 June, year 2016.

The agreement defines factors  $D_i(n)$ , making it possible to readjust target levels in the event of the engagement of review clauses:

$$\begin{split} & \operatorname{ValmI}_{i}(n) = \operatorname{mi}_{i}(n) + \operatorname{D}_{i}(n) \\ & \operatorname{ValMI}_{i}(n) = \operatorname{MI}_{i}(n) + \operatorname{D}_{i}(n) \\ & \operatorname{ValObjective}_{i}(n) = \operatorname{Objective}_{i}(n) + \operatorname{D}_{i}(n) \end{split}$$

Where, for indicators no. 1 to 7,  $MI_i(n)$  is defined as follows:

-  $MI_i(n) = 2*Objective_i(n)-mI_i(n)$ 

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Furthermore, for indicators no. 1 to 5, the median between the target level and minimum, and the median between the target level and maximum respectively have been defined in 2016 according to the following formulas:

- MedmI<sub>i</sub>(2016)=(mI<sub>i</sub>(2016)+Objective<sub>i</sub>(2016))/2

 $MedMI_{i}(2016) = (MI_{i}(2016) + Objective_{i}(2016))/2$ 

For n=2016 and in the event of review clauses A not being engaged,  $D_i(n)=0$ For n>2016 and in the event of review clauses B not being engaged,  $D_i(n)=D_i(n-1)$ 

A - First year review for the new availability indicators, i = 1 to 5

- ✓ If  $I_i(2016)$  ≤ Medm $I_i(2016)$ , then  $D_i(2016) = I_i(2016) MedmI_i(2016)$
- ✓ If  $I_i(2016)$  > MedMI<sub>i</sub>(2016), then  $D_i(2016) = I_i(2016) MedMI_i(2016)$
- ✓ If MedmI<sub>i</sub>(2016) ≤  $I_i(2016)$  ≤ MedMI<sub>i</sub>(n), then  $D_i(2016) = 0$
- B- Review in the event of a significant deviation from target for two years running for indicators i = 1 to 10:
  - ✓ If  $I_i(n-1) < ValmI_i(n-1)$  and If  $I_i(n-2) < ValmI_i(n-2)$  $D_i(n) = Max([I_i(n-1) -mI_i(n-1)], [I_i(n-2) -mI_i(n-2)])$
  - ✓ If  $I_i(n-1) > ValmI_i(n-1)$  and If  $I_i(n-2) < ValmI_i(n-2)$  $D_i(n) = Min([I_i(n-1) - MI_i(n-1)], [I_i(n-2)) - MI_i(n-2)]$

 $BI_i$  and  $LI_i$  respectively indicate the bonus and penalty factors relative to indicator no. "i", as defined under III.2.3.4.

For indicator "i" and for each year "n" subsequent to 2015, we then define a bonus-penalty  $PBI_i(n)$  such as:

- "Quality standards" indicators; i = 1 to 7:
  - if  $I_i(n) < Valm I_i(n)$ ,

 $PBI_i(n) = LI_i$ 

• if  $ValmI_i(n) \le I_i(n) \le ValObjective_i(n)$ ,

$$PBI_{i}(n) = LI_{i} \frac{I_{i}(n) - ValObjective_{i}(n)}{ValmI_{i}(n) - ValObjective_{i}(n)}$$

• if  $I_i(n) > ValObjective_i(n)$ 

 $PBI_i(n) = 0$ 

- "Excellence" indicators; i = 8 to 10:
  - if  $I_i(n) < ValmI_i(n)$ ,

$$PBI_i(n) = LI_i$$

• if  $\operatorname{Valm} I_i(n) \leq I_i(n) \leq \operatorname{ValObjective}_i(n) - f_i(n)$ ,

$$PBI_{i}(n) = LI_{i} \frac{I_{i}(n) - (ValObjective_{i}(n) - f_{i}(n))}{ValmI_{i}(n) - (ValObjective_{i}(n) - f_{i}(n))}$$

• if ValObjective<sub>i</sub>(n)-  $f_i(n)$ ,  $\leq I_i(n) \leq ValObjective_i(n) + f_i(n)$ ,

$$PBI_i(n) = 0$$

 $\label{eq:alpha} \quad \text{if ValObjective}_i(n) + \ f_i(n) \leq \mathrm{ValMI}_i(n),$ 

$$PBI_{i}(n) = BI_{i} \frac{I_{i}(n) - (ValObjective_{i}(n) + f_{i}(n))}{ValMI_{i}(n) - (ValObjective_{i}(n) + f_{i}(n))}$$

• if 
$$I_i(n) > ValMI_i(n)$$
,

## $PBI_i(n) = BI_i$

For each year "n" subsequent to 2015, the value of QDS(n+1) is then defined as

$$QDS(n+1) = \sum_{i=1}^{10} PBI_1(n)$$
# **APPENDIX 6**

Method of calculation for factors "INV1" and "INV2"

## FACTOR "INV<sub>1"</sub> »

The calculation of factor  $INV_1(n)$  is based on the "Performance of Investment Operations" ROI(n) indicator defined below:

#### 1. Field covered by the ROI indicator:

- the following investment operations and completion dates:
  - the extension of the East Pier at Paris-Orly; the estimated completion date is when the boarding lounge opens to the public;
  - the renovation of runway 4 at Paris-Orly; the estimated completion date is the day of return to normal operations;
  - the first phase of the renovation of runway 3 at Paris-Orly; the estimated completion date is the day of return to normal operations after the first phase of works;
  - the baggage sorting system in Hall L (TDS3): the estimated completion date is the day when the system comes into service;
  - The Orly New Departure Junction; the estimated completion date is that of core and shell allowing the start-up of technical lots and interior fitting works;
  - The junction of B and D terminals at Paris-Charles de Gaulle; the estimated completion date is that of core and shell allowing the start-up of technical lots and interior fitting works;
  - the link-up of the satellites of Terminal 1 at Paris-Charles de Gaulle; the estimated completion date is that of core and shell for the advanced hub building allowing the start-up of technical lots and interior fitting works.

#### 2. Methods of measurement for calculating the ROI indicator

To calculate the indicator, an operation is deemed completed when the completion date defined above has been reached. We thus measure a quarterly period of performance for each operation, if the completion date concerned has been reached before the end of the said quarterly period.

### 3. Definition of the ROI indicator

The annual indicator, measured from the third quarter of year "n-1" to the second quarter of year "n" inclusive, is the sum of the four quarterly indicators combined, each of them measuring the number of operations completed at the latest during the quarter concerned:

$$ROI(n) = \sum_{t \in n} roi(t)$$

where roi(t) is the number of operations listed above, completed at the latest during quarter t between the third quarter of year "n-1" and the second quarter of year "n" inclusive.

# 4. Targets of the ROI indicator

The targets of the ROI indicator relate to the works completion dates as follows:

	Target
Extension of the East Pier	Second quarter of 2016
Renovation of runway 4 at Paris-Orly	Fourth quarter of 2016
First phase of the renovation of runway 3 at Paris-Orly	Third quarter of 2018
Baggage sorting system in Hall L (TDS3)	Second quarter of 2018
Orly New Departure Junction	First quarter of 2018
Junction of B and D terminals	Second quarter of 2019
Link-up of the satellites of Terminal 1 at Paris-Charles de	Second quarter of 2019
Gaulle.	

Accordingly, the following target levels have been set for the ROI indicator corresponding to a nil value for  $INV_1$ , along with minimum levels "mI<sub>ROI</sub>" beyond which the penalty incurred by the  $INV_1$  factor is capped at -0.1%. Between these values, the penalty is calculated by straight-line interpolation:

ROI indicator	2016	2017	2018	2019	2020
mI <sub>ROI</sub>	0	4	8	17	26
<sub>ROI</sub> target	1	7	11	22	28

# 5. Calculation of the INV<sub>1</sub> indicator

For "n" subsequent or equal to 2016,  $I_{ROI}(n)$  indicates the value of the ROI indicator corresponding to the period from 1 July 2013, year "n-1" to 30 June, year "n".

For the year 2017, we then define the  $INV_1(2017)$  factor such as:

• if  $1 \le I_{ROI}(2016)$ 

 $INV_1(2017) = 0$ 

• otherwise  $INV_1(2017) = -0.03\%$ 

And for each year "n" subsequent to 2017, the  $INV_1(n)$  factor such as:

• if  $I_{ROI}(n-1) < mI_{ROI}(n-1)$ ,

$$INV_1(n) = -0.1\%$$

• if 
$$mI_{ROI}(n-1) \leq I_{ROI}(n-1) \leq Objective_{ROI}(n-1)$$
,

$$INV_1(n) = -0.1\% x \frac{I_{ROI}(n-1) - Objective_{ROI}(n-1)}{mI_{ROI}(n-1) - Objective_{ROIi}(n-1)}$$

• if 
$$Objective_i(n-1) \leq I_i(n-1)$$

$$INV_1(n) = 0$$

## "INV2" FACTOR »

The calculation of the  $INV_2(2020)$  factor is based on the principle of compensation, via rates applicable from 1 April 2020, of 70% of the saved costs, throughout the term of the agreement, owing to fewer investment expenditures between 2016 and 2018 in relation to 85% of initially scheduled expenditures, with respect to the budgets for current investments, the competitiveness of the transit platform and airport processes, and budgets dedicated to the quality of service and sustainable development.

In the event that  $DC_{2018}$  - 0.85 x  $DP_{2018} < 0$ , the INV<sub>2</sub>(2020) adjustment factor is calculated as follows:

 $INV_2(2020) = 70\%$  x (estimated deviation in depreciation costs over the agreement period + estimated deviation in return on invested capital over the agreement period)/(1+projected rate of growth for traffic from 2018 to 2020)

where:

- the deviation in depreciation is estimated on the basis of an average depreciation period of 20 years for the investments concerned;
- additionally, the deviation in return on invested capital is estimated based on the development profile for returns on used capital over the agreement period;
- the projected traffic growth rate from 2018 to 2020 is taken into account consistently with the price equations under III.2.3.1, through which formulas are able to achieve 2020 rates, supported by the bases of the last calendar year at that stage, i.e. 2018.

In the event that  $DC_{2018} - 0.85 \ge DP_{2018} < 0$ :

$$INV_2(2020) = 0.286 \text{ x} (DC_{2018} - 0.85 \text{ x} DP_{2018})$$

For the calculation of the  $INV_2$  (2020) factor,  $DC_{2018}$  and  $DP_{2018}$  are respectively the expenditures recorded and initially scheduled from 2016 to 2018 in current euros relative to the budgets for current investments, the competitiveness of the transit hub and other processes, the quality of service and sustainable development.

 $DP_{2018}$  is deducted from the following sequence expressed in 2015 euros:

Amounts in € millions, 2015	2016	2017	2018	Total 2016-2018
Current Investments				
Current investments - Paris-Charles de Gaulle	97	102	81	280
Rehabilitation of runway 2	26	0	0	26
Other operations - Paris-Charles de Gaulle	71	102	81	254
Current investments - Paris-Orly	63	60	63	186
Renovation of aprons and taxiways	1	16	5	22
Renewal of waterproofing and strengthening of Bridge 2	0	15	12	27
Other operations - Paris-Orly	62	29	46	137
Current Investments - Le Bourget	2	2	1	4
Current Investments Aeronautical real estate	3	3	4	10
IT networks and systems	13	13	13	38
Total Current Investments	178	179	162	518
Competitiveness of the transit hub and other processes				
Terminals	28	20	8	55
Paris-Charles de Gaulle	23	16	5	43
Paris-Orly	5	4	3	12
Aeronautical aprons and taxiways	0	16	18	33
Securing the two parallel northern runways (Paris-Charles de Gaulle airport)	0	16	8	24
Aprons for large aircraft (Paris-Charles de Gaulle)	0	0	9	9
Aircraft aprons - Paris-Orly	0	0	0	0
Operational reliability	14	12	13	39
Paris-Charles de Gaulle	6	6	6	19
Paris-Orly	8	6	6	20
Baggage sorting systems	3	12	34	49
TBS4 (Paris-Charles de Gaulle)	0	10	31	41
Other projects - Paris-Charles de Gaulle	3	2	4	8
Change in flows	10	2	4	16
Paris-Orly	8	2	4	14
Paris-Charles de Gaulle	2	0	0	2
IT projects	21	21	21	64
Total competitiveness of the transit hub and other processes	76	83	98	257
Quality of service and sustainable development				
Sustainable development	10	7	11	28
Quality of Service	32	31	30	93
Total Quality of service and sustainable development	41	38	41	121
TOTAL FOR THE INV2 FACTOR	295	300	301	896

Updating into current euros is calculated in accordance with the indices below:

$$IC_n = 0.5 \frac{BT01_n}{BT01_{2015}} + 0.1 \frac{TP01_n}{TP01_{2015}} \\ 0.3 \frac{BT50_n}{BT50_{2015}} + 0.1 \frac{SYNTEC_n}{SYNTEC_{2015}}$$

where:

- $BT01_n$  is the Building general index for all trades as published by INSEE (BT01) May value of year "n"
- TP01<sub>n</sub> is the Public Works general index for all works, as published by INSEE (TP01) May value of year "n"
- BT50<sub>n</sub> is the Renovation-Maintenance general index for all trades as published by INSEE (BT50) May value of year "n"
- SYNTEC<sub>n</sub> is the index measured by the SYNTEC federation representing changes in price for service performance, especially engineering and IT May value of year "n"

Should any of these indices no longer be available during the course of this agreement, Aéroports de Paris will suggest a replacement index to the Government. This proposal is submitted for Government approval within one month from the notification thereof. After this period, it shall be deemed to be accepted.

#### **APPENDIX 7**

#### Methods of calculation for the OPEX factor

The projected operating costs for 2015 (CP<sub>2015</sub>), taken into account as stated under paragraph III.2.3.6., are:

-  $CP_{2015}$ : €885 million.

For the purposes of this agreement, benchmark operating costs for 2018 ( $CP_{2018}$ ) are calculated based on  $CP_{2015}$  according to a composite growth rate using elasticities in terms of traffic and inflation agreed upon by the two parties:

$$CP_{2018} = CP_{2015} (1 + (0.47 \times VOL_{2018} + 1.60 \times PRIX_{2018}))^{3}$$

where:

- VOL $_{2018}$  is the average annual growth rate for passenger traffic over the 3-year period from 2015 to 2018;
- PRIX<sub>2018</sub> is the average annual rate of inflation over the 3-year period from 2015 to 2018 calculated using the consumer price index (excluding tobacco) published by INSEE (IPC 4018E).

For n = 2020, the OPEX factor (2020) is equal to:

- if  $0.5 \times (CC_{2018} - 1.05 \times CP_{2018}) > GTR (2020, T_{ref} (2020)) \times 1\%$ OPEX(2020) = GTR (2020, T<sub>ref</sub> (2020)) x (- 1%)

- if  $0 < 0.5 \times (CC_{2018} - 1.05 \times CP_{2018}) \le GTR (2020, T_{ref} (2020)) \times 1\%$ OPEX(2020) = - 0.5 × (CC<sub>2018</sub> - 1.05 × CP<sub>2018</sub>)

- if  $CC_{2018}$  - 1.05 ×  $CP_{2018} \le 0$ OPEX(2020) = 0

where:

CC<sub>2018</sub> and CP<sub>2018</sub> are respectively the operating costs (in constant euros) recorded in 2018 and serving as a benchmark in 2018.

The operating costs recorded are adjusted as and when needed, after agreement between the parties, in the following cases occurring over the period from 2016 to 2018:

- in the event that, on account of new legislative or regulatory provisions specific to airport operators, of new provisions added to company specifications or of a decision from the Government, annual operating costs rise or fall by more than €5 million ex VAT (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August);
- in the event that Aéroports de Paris, during the course of the agreement, is required to provide new airport services under article R.224-1 of the French Civil Aviation Code, representing annual operating costs of over €5 million (2015 value, indexation on the consumer price index, excluding tobacco IPC 4018E of the month of August);

# **APPENDIX 8**

# Methods for the allocation of assets, income and expenses between the regulated scope and other activities

- Scope Sub-scope Activities Aviation excluding security services and SSLIA1 Aeronautical cash Access Management of roadways, shuttles, bus stations and vehicle impoundment Parks Car parks aside from parking for diversification real estate offices Regulated scope Airport real estate Management of property portfolio excluding terminals in the airport zones Industrial services revenue Energies (electricity, heating, cooling), water, waste, use of networks **Airport rentals** Furniture or real estate rented inside terminals (desks, offices, stores, etc.) Miscellaneous service revenues Business centres, hospitality and official receptions, VIP lounges, DSNA services<sup>2</sup> Retail Shops, catering, car rentals, banking services, advertising **Diversification real estate** Buildings for offices, retail, hotels, warehouses and logistics Airport tax Revenue from airport safety and security services Non-regulated scope TNSA<sup>3</sup> Revenues from tax levied on aircraft noise pollution International and airport development Airport development and international holdings Business conducted by Aéroports de Paris subsidiaries or holdings, outside of real Other activities estate or commercial business in France, and excluding the IDA segment
- Scope of regulation

<sup>1</sup> Aircraft rescue fire station and fire-fighting services <sup>2</sup> Aircraft navigation services division (DGAC)

<sup>3</sup> Tax on aircraft noise pollution

General principles behind the distribution of the net book value (NBV) of ADP SA assets between the regulated and non-regulated scopes.

The method for allocating NBV to different scopes of ADP SA activity (regulated, non-regulated) depends on the nature of assets. Distinction is made between:

1	Investment needed for aviation activity	Exclusively regulated projects 1a	<ul> <li>Investments wholly dedicated to aviation are allocated exclusively to the regulated scop         <ul> <li><u>Activities subject to fees:</u> runways, baggage sorting systems, aircraft boarding bridge etc.</li> <li><u>Regulated activities not subject to fees:</u> cargo terminal, aircraft maintenance hangars biomass heating plant, etc.</li> </ul> </li> </ul>		
		Combined projects 1b	Investments whose functionalities are common to both scopes (regulated and non- regulated) are subject to an allocation per scope using methodology that is specific to each infrastructure. →E.g.: terminal structures, common infrastructure dedicated to both airport real estate and diversification real estate, etc.		
2	Investment not needed for aviation activity	Exclusively non-regulated projects	<ul> <li>Investments wholly dedicated to non-aviation activity are allocated exclusively to the non-regulated scope.</li> <li>→E.g.: the luxury retail block of terminal 2E, office blocks, hotels, inspection equipment for baggage in holds, etc.</li> </ul>		

• Principle 1a: Aviation investments related exclusively to the regulated scope

Principle 1a	Regulated projects	Investments wholly dedicated to aviation are allocated exclusively to the regulated scope.					
Aeronautical cash         of which:         • Passenger reception infrastructure (check-in lounges, boarding lounges, baggage delivery rooms, etc.)         • Infrastructure related to aircraft parking (boarding bridges, aircraft aprons, hydrants, etc.)         • Infrastructure related to aircraft parking (nurways, lighting/beacons, etc.)         • Baggage sorting systems         • Delecing facilities							
<ul> <li>Industrial services rev</li> <li>The thermal-cooling CDG, electrical distri</li> </ul>	Industrial services revenue The thermal-cooling power plant at CDG, ORY geothermal plant, water network deviations, power generator, 225 kV power plant, solar power farm at CDG, electrical distribution petworks, etc.						
<ul> <li>Aeronautical real estat</li> <li>Cargo terminals, airc</li> </ul>	<b>te</b> raft hangars, FedE	x buildings extension, etc.					
Parks  Short- and long-stay car-parks							
Terminal rental revenue     Lounges, offices and other private premises inside terminals							
Miscellaneous service revenues Automatic baggage drop-off system (DBA), VIP pavilion, etc.							
Other							

 Principle 1b: Aviation investments with functionalities common to both the regulated and non-regulated scopes

Principle 1b	Combined projects	Investments with functionalities common to both scopes (regulated and non-regulated) are subject to an allocation per scope using methodology that is specific to each infrastructure		
	Desc	cription	Method of allocation	
Terminal infrastructur CDG2 A/B/C/D CDG2 E/F (excluding CDG2 G Hall M in terminal 2E Hall L in terminal 2E CDG1 CDG3 Orly South Orly West	es g S3 and S4) (satellite S4) (satellite S3)		Proportionally to the weighted surface areas of terminals	
<ul> <li>Combined real estate</li> <li>Development of netweestate portfolio, lands</li> </ul>	vorks over a zone	dedicated to real estate, signage of real ent work over real estate zones, etc.	Proportionally to revenue from airport real estate and from diversification real estate	
Specific infrastructure RER train station 1 RER train station 2 CDGVal	S		According to a study of passenger flows and proportionally to surface areas <sup>1</sup> Proportionally to surface areas <sup>1</sup> Average distribution for RER train stations weighted by their traffic <sup>1</sup>	
Common roadways <ul> <li>Road accesses - CD</li> </ul>	G and ORY		Proportionally to the gross value of the zones served <sup>1</sup>	
Other -				
<ol> <li>In a second second suble the sublement</li> </ol>	and a second standard from the second			

<sup>1</sup> In accordance with the recommendation from CocoAéro and its notice of 24 October 2014.

Principle 1b: Focus on combined aviation - terminal infrastructure projects (1/3)

# Methodology for the allocation of Terminal NBV



Principle 1b: Focus on combined aviation - terminal infrastructure projects (2/3)

## Methodology for the allocation of Terminal NBV



Principle 1b: Focus on combined aviation - terminal infrastructure projects (3/3)

#### Methodology for the allocation of Terminal NBV



Principle 2: Non-aviation investments, allocated exclusively to the non-regulated scope



 General principles for the distribution of ADP SA's WCR accounts between different scopes.

The method of allocation to different scopes of ADP SA activity (regulated, non-regulated) depends on the type of WCR accounts. Distinction is made between:



 General principles for the distribution of ADP SA's income and expenses <sup>1</sup> between different scopes



The method of allocation to different scopes of ADP SA activity (regulated, non-regulated) depends on the nature of income and expenses. Distinction is made between:

<sup>1</sup> excluding depreciation and amortisation expenses, addressed in the general principles of the spread of NBV <sup>2</sup> excluding end-of-career benefits, profit-sharing, etc.



## Recap diagram of the P&L regulation mechanism

• Principle 1: P&L - Income attributable exclusively to a given scope

	All the lines of ADP SA revenue are attributed exclusively to one scope of activity or to the other - regulated or non-regulated
	. Airport fees
Principle 1	Ancillary fees
exclusively to a given	. Regulated rental income (Terminal rental revenue and airport real estate)
scope	- Industrial services revenue
	. Retail revenue
	Car parks and access roads income
	Other revenue (repayment Supplementary Budget for Civil Aviation)
	Revenue from airport safety and security services (airport tax)

Principle 2a: P&L - External common income and expenses, assigned directly



- <sup>1</sup> excluding end-of-career benefits, profit-sharing, etc.
  - Principle 2b: P&L Internal common expenses, assigned directly

Principle 2b		Internal services revenue common to several scopes and for which a distinction of end-scope (regulated or non-regulated) is made		
Description			Method of allocation	
<ul> <li>Maintenanc repairs, adju</li> <li>Purchases: work surveill</li> <li>Miscellanec managemen terminals)</li> </ul>	e (excluding transv stment, servicing, co prime contracting se ance (delegated proj us service revenue t, real estate rental c	ersal activities in terminals) : trouble-shooting, htrol and verification of hardware and software rvices (engineering and architecture), research and ect management), s: energy consumption (electricity, thermal, etc.), waste harges (renting out blocks of offices or office space in	Valuation is based on the product between (i) the number of work units booked at real cost for each service activity (hours or days of labour, kW/h, cubic metres, room according to service performance) and (ii) the transfer price calculated on the real price 1 year earlier: Price x hour + direct costs <sup>1</sup> Price x hour + direct costs <sup>1</sup> Price x day/hour/cubic metres/room/sq.m/kWh according to type of service	

<sup>1</sup> certain amounts linked directly to any one of the services above (cost of goods, sub-contracting) are assigned directly to it.

Principle 3a: P&L - External common expenses assigned indirectly (via attribution keys)

Principle 3a	External expenses	Common expenses that are spread over different scopes (regulated, non-regulated, still to be allocated) based on keys and established according to the nature of the expense				
Description			Method of allocation			
Taxes other than income taxes         -       Territorial financial contribution (CET)         -       C3S         -       Tax on company vehicles         -       Payroll tax			<ul> <li>Proportionally to the gross value of assets 2 years ago (in accordance with the tax base of the Property Contribution from Companies)</li> <li>Proportionally to the revenue of different scopes</li> <li>Proportionally to the car fleet of different scopes</li> <li>Proportionally to direct staff costs</li> </ul>			
Insurance - Civil liability, vehicles			<ul> <li>spread of civil liability insurance proportionally to revenue</li> <li>spread of vehicle insurance proportionally to the number of vehicles</li> </ul>			
Indirect staff costs and profit sharing - profit-sharing, works council subsidy, end-of-career benefits, private health insurance, etc.		of-career benefits,	- Proportionally to direct staff costs			

At the end of stage 3a, a part of these expenses is assigned to the "still to be allocated" scope, and definitively assigned to regulated or non-regulated scopes via internal service revenues in stages 2b and 3b

Principle 3b: P&L - Internal common expenses assigned indirectly (via attribution keys)

	Principle 3b	Internal expenses	Internal services revenue common to several scopes and allocated according to the nature of the service			
- Administrative costs: support teams for operational units, platforms (quality unit, operations unit, etc.) and for central management (General management, HR, IS, etc.)				-	Proportionally to expenses (aside from exceptional and financial charges)	
- Use of common infrastructures: consolidates the expenses from terminal buildings (purchases, subcontracting), immediate access facilities (linear, bus stations, shuttles, rear taxi base, RER train station) and rainwater treatment systems			idates the expenses from terminal buildings ccess facilities (linear, bus stations, shuttles, rear taxi atment systems	-	Proportionally to surface areas (for building expenses), to waterproofed surfaces (for rainwater treatment systems), etc.	
-	Transversal mainter	nance in terminals		-	Proportionally to surface areas	